California Regional Water Quality Control Board
San Diego Region

Order No. R9-2006-0104

Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Standards Certification

For

Rancho Mission Viejo, LLC
Rancho Mission Viejo Ranch Plan Planning Area 1,
Orange County

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A. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board) finds that:

1. Waste Discharge Requirements Authority and Responsibility. Section 13260(a) of the California Water Code (Water Code) requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, which could affect the quality of the waters of the State, file a report of waste discharge (ROWD). The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. Water Code section 13263(a) requires that waste discharge requirements (WDRs) be prescribed as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. Such WDRs must implement any relevant water quality control plans, taking into consideration beneficial uses to be protected, the water quality objectives reasonably required for those purposes, other waste discharges, the need to prevent nuisance, and the provisions of section 13241 of the Water Code.

2. Section 401 Authority And Responsibility. Section 401 [33 U.S.C. 1341] of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) allows the California State Water Resources Control Board (State Board) and the Regional Board to regulate federally-permitted activities, including dredge and fill discharges to federal waters. Discharges of fill to non-federal waters of the State are not subject to Section 401 certification. Section 401 requires any applicant for a Federal license or permit to conduct any activity which may result in any discharge into the navigable waters, to provide the licensing or permitting agency a certification from the State water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with water quality standards and implementation plans. The regulations for California's 401 Program (CCR Title 23, Chapter 28, sections 3830 to 3869) specify the information to be included in 401 applications and Regional Board Certification Orders. The fundamental requirement of a Regional Board Certification Order is that it describes the discharge, proposed mitigation, and any conditions in adequate detail to protect beneficial uses and allow effective enforcement if necessary.

3. Authority To Require Discharger Reports. California Water Code Sections 13267(b) and 13383 contain criteria that allow the Regional Board to conduct investigations and to establish technical, monitoring, inspection, entry, reporting, and record keeping requirements from any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste in accordance with the conditions in the section.

4. Basin Plan. The *Comprehensive Water Quality Control Plan for the San Diego Basin (9) (Basin Plan)* was adopted by the Regional Board on September 8, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan designates beneficial uses, narrative and numerical water quality objectives, and prohibitions which are applicable to the discharges regulated under this Order.

5. Project Description. Rancho Mission Viejo, LLC (Discharger) proposes the discharge of fill material into waters of the State, including both federal and non-federal waters, as part of the Rancho Mission Viejo Ranch Plan (Ranch Plan), Planning Area 1 project (Project) in unincorporated Orange County. The Project includes the grading of Planning Area 1 and construction of associated infrastructure (Attachment 1). The land-use plan for the 810-acre Project area includes 488 acres of gross residential, 84 acres for an urban activity center, and 238 acres of open space that are anticipated to be dedicated as habitat reserve areas. The urban activity center includes internal roadways, local streets, some residential development, retail commercial, a wellness center, local and community parks, trails, community facilities and open space uses. Affected waters of the U.S. and/or State are tributary to San Juan Creek in the Ortega Hydrologic Subarea (HSA 901.28). The Ranch Plan addresses long-term planning for the 22,815 acres owned by the Discharger. The Ranch Plan proposes up to 14,000 dwelling units, as well as retail, office, and recreational uses, within a development area of approximately 7,694 acres. The remaining 15,121 acres would be retained as open space. Infrastructure would be constructed to support all of these uses, including road improvements, utility improvements, and schools. Ranching and agricultural activities would be retained within a portion of the proposed open space area.

6. Beneficial Uses. The Basin Plan designates the following beneficial uses of surface waters in the project's hydrologic subarea: Agricultural Supply (AGR), Industrial Service Supply (IND), Contact Water Recreation (REC 1), Non-contact Water Recreation (REC 2), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), and Cold Freshwater Habitat (COLD). Designated beneficial uses of ground waters in the project area include Domestic Supply (MUN), Agricultural Supply (AGR), and Industrial Service Supply (IND).

7. CEQA. On November 8, 2004 the County of Orange approved a final Program Environmental Impact Report (EIR) for the Ranch Plan (SCH no. 2003021141). The EIR establishes requirements for the content of final stormwater management and biological resource mitigation plans that had not been approved by the County at the time the EIR was approved. Two separate actions filed in the Orange County Superior Court challenging the approval of the EIR have been settled and dismissed. Under the terms of the settlements, the Ranch Plan was refined to reduce the amount of acreage for development activities and further concentrate development in areas with lower biological resource values.

8. Coordinated Planning Process. The EIR was prepared as part of a coordinated public planning process that includes the preparation of two other major planning and regulatory components within the Ranch Plan area. One process is the Southern Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which is being prepared by the County of Orange in cooperation with the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS). The second major planning effort is a Special Area Management Plan/Master Streambed Alteration Agreement (SAMP/MSAA), which addresses impacts to aquatic resources subject to the requirements of the federal Clean Water Act (CWA) Section 404 and the state Fish and Game Code (Sections 1600-1603). The SAMP is a voluntary watershed-level planning and permitting process for future actions subject to Section 404 regulation by the U.S. Army Corps of Engineers (Corps). The purpose of the SAMP is to provide for reasonable economic development and the protection and long-term management of sensitive aquatic biological and hydrological resources. A draft Environmental Impact Statement for the SAMP (*Draft EIS, San Juan Creek and Western San Mateo Creek Watershed Special Area Management Plan)* was released by the Corps in November 2005. Through the coordinated planning process the Discharger has avoided and minimized impacts to waters of the U.S./State consistent with the requirements of the Basin Plan.

9. Description of Fill activities. In order to accommodate the planned development, the Discharger proposes to discharge fill material into thirteen waterbodies and portions of San Juan Creek. The total fill would cover 6.53 acres of waters of the State, of which 3.57 acres are temporary, meaning that the discharge area will be restored to conditions supportive of beneficial uses. The remaining 2.96 acres of fill (13,663 linear feet) will permanently eliminate the affected waterbodies. The discharge of fill to 6.23 of the 6.53 acres requires permitting subject to sections 401 and 404 of the federal Clean Water Act [33 USC 1342 & 1344] because the fill locations were determined by the Corps to be federal waters of the U.S. The discharge of fill to the remaining 0.30 acres of waters of the State (1,214 linear feet) was determined by the Corps to be outside of federal jurisdiction and is, therefore, subject to permitting from the State, but not the Corps. All discharges to the non-federal waters are considered permanent. The proposed fill will result from grading and construction to support general urban land uses.

Jurisdictional Waters	Proposed to be permanently filled (acres)	Proposed to be temporarily filled (acres)
Federal Waters	2.66	3.57
Non-federal Waters of the State	0.30	0.00
TOTAL ACRES	**2.96**	**3.57**

10. WDRs are Necessary to Implement the Basin Plan. The permanent discharge of fill into waters of the State to support the proposed urban land uses will eliminate beneficial uses and may contribute to conditions of contamination, pollution or nuisance downstream of the fill areas. The discharge of fill to waterbodies outside of San Juan Creek will completely eliminate those waterbodies and the beneficial uses they support. The discharge of fill to San Juan Creek to support road crossings and stormdrain infrastructure will lead to localized loss or reduction of beneficial uses within the fill area. Conceptual plans and programs to implement the water resources and biological resources mitigation measures of the EIR and SAMP are subject to refinement and clarification following adoption of the EIR as site specific development plans are produced. Waste discharge requirements and water quality certification conditions to mitigate and compensate for the loss of beneficial uses and threats to water quality resulting from the discharge of fill material to waters of the State are necessary to implement the Basin Plan.

11. Habitat Mitigation Plans. The Discharger has proposed to mitigate effects of the discharges of fill to waters of the State/U.S. through the creation and enhancement of waters of the State/U.S. in the vicinity of the Project area at a 1:1 acreage ratio. All waters of the State/U.S. receiving temporary discharges will be restored upon removal of the fill. Wetland and riparian habitat has already been created by the Discharger at the Gobernadora Ecological Restoration Area located in Canada Gobernadora (HSA 901.24), and that will serve as mitigation for discharges of fill to wetlands and vegetated, non-wetland streambeds. Mitigation for discharges of fill to non-vegetated waters of the State and/or U.S. will be achieved by implementation of the *Invasive Species Control Plan* (July 2006, Glenn Lukos Associates, Inc.) within San Juan Creek. The Discharger has prepared a functional assessment that demonstrates a net gain in water resource functions from implementation of the proposed mitigation for non-vegetated waters. In addition, the Discharger intends to fulfill commitments of the coordinated planning process for implementing the Aquatic Resource Conservation Plan and establishing a mechanism for the long-term protection of significant aquatic resources in the Ranch Plan area. The proposed mitigation plans will adequately compensate for loss of beneficial uses and habitat within waters of the U.S. and non-federal waters of the State associated with the discharge of fill material. This Order requires the discharger to proceed with the proposed mitigation plans.

12. Post-Construction Stormwater Plan. The Discharger has proposed to implement a plan for the management of stormwater discharges associated with the proposed project (*Master Area / Sub-Area Water Quality Management Plan [WQMP] for The Ranch Plan, Planning Area 1*. GeoSyntec Consultants, Inc., April 2006). Such discharges may threaten beneficial uses through the discharge of urban runoff pollutants (e.g., oil and grease, heavy metals, pathogens, nutrients, and trash) into San Juan Creek and on-site tributaries thereto. The discharge may also threaten downstream water quality and beneficial uses by altering hydrology and geomorphic processes. To mitigate the post-construction threats to water quality and beneficial uses from stormwater discharges, the discharger proposes source control, site design, and treatment control best management practices (BMPs). This Order requires the discharger to implement the proposed conceptual post-construction BMP measures and to report on design details as development plans are refined.

13. Construction Stormwater Plan. Construction activities associated with the proposed discharges of fill would threaten beneficial uses on-site and downstream. The Discharger intends to file a Notice of Intent to the State Water Resources Control Board for coverage under State Water Resources Control Board (State Water Board) Order No. 99-08-DWQ, *National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) For Discharges Of Storm Water Runoff Associated With Construction Activity*. The Regional Board may conduct inspections to verify compliance with Order No. 99-08-DWQ, including, but not limited to, implementation of a storm water pollution prevention plan. This Order also requires that San Juan Creek be routinely monitored for changes in geomorphology during the construction phase.

14. This Order specifies waste discharge requirements that are necessary to adequately address effects on, and threats to, water quality standards resulting from the filling of waters of the U.S. and waters of the State, to meet the objectives of the State Wetlands Conservation Policy (Executive Order W-59-93), to be consistent with non-degradation provisions of State Board Resolution No. 68-16, and to accommodate and require appropriate changes during implementation of the Project and its construction. Through adherence to the waste discharge requirements, the Project, as described in this Order, will not result in State water quality standards being exceeded.

15. These requirements for the discharge of fill material are feasible because they have been proposed by the discharger and/or reflect mitigation conditions incorporated into the approved Environmental Impact Report.

16. The Regional Board has notified the Discharger and other interested persons and agencies of its intent to prescribe Waste Discharge Requirements and Section 401 Water Quality Certification and has provided them with an opportunity for public hearing and an opportunity to submit written comments.

17. The Regional Board, in a public meeting on October 11, 2006, heard and considered all comments pertaining to the proposed discharge.

IT IS HEREBY ORDERED that Rancho Mission Viejo, LLC (hereinafter Discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

B. PROHIBITIONS

1. The discharge of waste in a manner other than as described in the findings of this Order is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed change prior to the discharge occurring.

2. The discharge of fill material is prohibited in a manner that has not been described in the application / report of waste discharge and for which valid waste discharge requirements are not in force.

3. The discharge of waste shall not create a condition of pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code.

4. Discharges to surface waters of wastes or pollutants that are not otherwise regulated by separate National Pollutant Discharge Elimination System (NPDES) requirements are prohibited.

5. The discharge of sand, silt, clay, or other earthen materials from any activity in quantities which cause deleterious bottom deposits, turbidity, or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

6. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.

7. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board or State Water Board.

C. PROJECT PROVISIONS

1. Standard conditions applicable to Clean Water Act Section 401 Water Quality Certification (Certification):

a. Every Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC §13330 and 23 CCR §3867.

b. Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR §3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

c. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR §3833 and owed by the dischargers.

2. The authorization to discharge fill material pursuant to this Certification is valid only for a period of five years or until the expiration of the associated U.S. Army Corps of Engineers Section 404 permits, whichever is sooner.

3. Any proposed change in construction that may alter flow patterns and/or change the approved impact footprint is prohibited without Regional Board approval. Not later than 30 days prior to the beginning of any proposed change, the Discharger shall submit, acceptable to the Regional Board, detailed plans and specifications showing the proposed change in relationship to the approved project.

4. The treatment, storage, and disposal of wastewater during the life of the project must be done in accordance with waste discharge requirements established by the Regional Board pursuant to CWC §13260.

5. The Discharger shall, at all times, maintain appropriate types and sufficient quantities of materials onsite to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the U.S. and/or State.

6. The Discharger shall comply with the requirements of State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) For Discharges Of Storm Water Runoff Associated With Construction Activity.

7. The Discharger shall comply with the requirements of Regional Board Order No. R9-2001-96 NPDES No. CAG919002, General Waste Discharge Requirements For Groundwater Extraction Waste Discharges From Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within The San Diego Region Except for San Diego Bay.

8. The Discharger shall comply with the requirements of State Board Water Quality Order No. 2004-0009-DWQ and Statewide General NPDES Permit for The Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of The United States, General Permit No. CAG990005 and State Board Water Quality Order No. 2004-0008-DWQ Statewide General NPDES Permit for The Discharges of Aquatic Pesticides To Surface Waters of The United States for Vector Control, General Permit No. CAG990004.

9. The Discharger shall notify the Regional Board in writing within 10 days following the initiation of discharge of fill to on-site waters of the State and U.S.

10. The Discharger shall demarcate all areas of temporary and planned disturbance to San Juan Creek prior to implementing activities within those areas such that all personnel working in those areas can clearly identify the limits of disturbance. The Discharger shall staff a qualified biologist on site during project construction of any activities within San Juan Creek to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work onsite if a violation occurs or has the potential to occur. Records from the biologist's activities shall be kept on-site and made available for review by Regional Board inspectors.

11. No plant species on the most recent California Invasive Plant Council (Cal-IPC) List, "Exotic Pest Plants of Greatest Ecological Concern in California[1]" shall be planted in mitigation areas, waters of the State, vegetated stormwater BMP areas, or other areas used to convey urban runoff and stormwater.

12. The Discharger shall implement development design features specifically to prevent the discharge of pathogens and indicator fecal bacteria (i.e. *e.*coli, *enterococci*, and fecal coliforms) in dry-weather urban runoff to San Juan Creek from each residential and commercial area. The discharger shall also implement development design features for the treatment of unavoidable loadings. These features shall be implemented where feasible and shall be maintained over the life of the Project.

13. The Discharger shall implement a Stream Monitoring Program in San Juan Creek to assess changes in geomorphology and channel shape in the Planning Area 1 project area. The Program shall be based upon the proposed program described in the Program Environmental Impact Report (EIR) for the Ranch Plan. The Program shall include topographic cross-sections, visual observations of channel bank conditions, and photographs of areas of concern that appear to be changes in the natural alluvial stream system. The Program shall require that areas of concern be assessed for feasible remedies.

    a. The Discharger shall provide a copy of the Stream Monitoring Program to the Regional Board prior to discharging fill material into any tributary to San Juan Creek; and

[1] The Cal-IPC list may be found on-line at http://www.cal-ipc.org/.

b. The Discharger shall provide annual reports to the Regional Board in accordance with the Monitoring and Reporting Program in Attachment C of this Order.

14. The Discharger shall develop a Stream Stabilization Program for the Planning Area 1 project area to assess conditions of localized erosion in the vicinity of all stormdrain outfalls associated with the Planning Area 1 project. The Program shall be based upon the proposed program described in the Program EIR for the Ranch Plan. The Program shall require that areas of erosion be assessed for feasible remedies, and that a timetable be developed for remediation.

    a. The Discharger shall provide a copy of the Stream Stabilization Program to the Regional Board prior to discharging fill material into San Juan Creek; and

    b. The Discharger shall provide annual reports to the Regional Board in accordance with the Monitoring and Reporting Program in Attachment C of this Order.

15. Groundwater Protection. The Discharger shall implement planning, design, and maintenance measures to prevent pollutants in the stormwater conveyance system from affecting groundwater quality.

    a. Detention basins and lakes shall be constructed to prevent possible contamination of groundwater below the facility. Soils and groundwater elevation shall be evaluated for each site, and design adjustments shall be made in response to rapidly percolating soils, such as sand, and/or groundwater elevations less than ten feet below the planned base of the basins and lake. Regardless of soil types, all detention basins shall be constructed so that the base of the facility will not intersect the seasonal high water table elevations;

    b. If the Regional Board determines that the Discharger fails to implement adequate design and maintenance controls over the life of the project, or monitoring demonstrates that groundwater quality is being affected by the Project, the Regional Board may require implementation of additional BMPs and/or a groundwater monitoring plan be developed for areas of, and down-gradient of, stormwater infiltration.

D. MITIGATION PROVISIONS FOR FEDERAL AND STATE WATERS

1. The Discharger shall implement the plans for mitigation as proposed in support of the 401 Certification application and Report of Waste Discharge and as may be modified following review by the Regional Board to assure compliance with this Order. The final Monitoring Plan shall be consistent with the Monitoring and Reporting Program, and future revisions thereto, in Attachment C of this Order.

2. Mitigation for temporary discharges of fill to federal and non-federal waters of the State shall be achieved by the removal of fill within one month of completion of work in the immediate area and by the implementation of measures necessary to restore conditions for the area to support beneficial uses appropriate for the waterbody. Restoration shall include grading of disturbed areas to pre-project contours and revegetation with native species (where pre-project vegetation existed). The Discharger shall implement all necessary BMPs to control erosion and runoff from areas associated with temporary fills.

3. Compensatory mitigation for permanent discharges of fill to 2.96 acres of federal and non-federal waters of the State shall be achieved as follows:

    a. Vegetated Waters: Mitigation for permanent discharges of fill into wetlands and other vegetated waters of the State and/or U.S. shall be achieved at a 1:1 ratio by the maintenance in perpetuity of no less than 2.19 acres of created waters of the State at the Gobernadora Ecosystem Restoration Area (GERA). The 2.19 acres shall serve as mitigation exclusively for this Project; and

    b. Unvegetated Waters: Mitigation for permanent discharges of fill into unvegetated waters of the State and/or U.S. shall be achieved at a 1:1 acreage ratio and a greater than 1:1 functional ratio by implementation of the *Invasive Species Control Plan* (Glenn Lukos Associates, July 2006) for no less than 0.77 acres within San Juan Creek. For the purpose of determining mitigation credit for the removal of exotic/invasive plant species, only the actual area occupied by exotic/invasive plant species shall be quantified to comply with mitigation requirements. Monitoring shall be done consistent with the Monitoring and Reporting Program in Attachment C of this Order to document functional status of the mitigation areas. If the functional assessment monitoring cannot demonstrate after five years that the estimated functional benefits have been achieved, the Discharger shall conduct 2.5 acres of additional enhancement activities within San Juan Creek.

4. The preparation of proposed mitigation areas shall be concurrent with (or prior to) the discharge of fill material into waters of the U.S. and/or State. Implementation of the *Invasive Species Control Plan* for Planning Area 1 (0.77 acres) shall be completed no later than nine months following the discharge of fill into on-site waters of the State. Delays in implementing mitigation shall result in increased mitigation requirements by 0.01 acre for each month of delay.

5. All mitigation areas shall be protected in perpetuity from land-use and maintenance activities that would threaten water quality or beneficial uses within the mitigation area. Within one year following the discharge of fill material to waters of the U.S./State, the Discharger shall provide the Regional Board with a plan and timetable for establishing a permanent protection mechanism (e.g., conservation easement or deed restriction) that prohibits development, dredging, mowing, and/or other non-emergency activities that would result in permanent or temporary disturbance of the mitigation area.

6. Within five years from the initial discharge of fill to waters of the State, the Discharger shall establish a program to provide for maintenance in perpetuity of all mitigation areas subject to the *Invasive Species Control Plan* to ensure that invasive species do not re-colonize the mitigation areas and that mitigation activities do not reduce the ability of the waters to support beneficial uses (e.g,. excessive sediment erosion or accumulation).

7. Responsible Party Updates: The Discharger shall provide the name and contact information of any third party accepting responsibility for implementing the mitigation requirements of this Certification. The notification shall be submitted to the Regional Board within 30 days of the transfer of responsibility. The notification shall include a signed statement from the new party demonstrating acceptance and understanding of the responsibility to meet the mitigation conditions and applicable requirements of the Certification.

8. The Discharger shall implement BMPs to prevent the discharge of pollutants into off-site mitigation areas from stormwater and dry-weather runoff.

9. Within five years following enhancement activities, mitigation areas in San Juan Creek shall closely resemble the expected functional success scores in the *Hybrid Wetland Functional* Assessment (Glenn Lukos Associates, Inc., July 2006) prepared for the project. If mitigation areas fail to meet their expected functional success criteria, the Discharger shall prepare remedial measures, acceptable to the Regional Board, to be implemented within one year following the determination that success criteria were not reached.

10. If at any time during the implementation and establishment of planted or graded mitigation area(s), and prior to verification of meeting success criteria, a catastrophic natural event (e.g., fire, flood) occurs and impacts the mitigation area, the Discharger shall be responsible for repair and replanting of the damaged area(s).

11. For purposes of this Order, creation is defined as the creation of vegetated or unvegetated waters of the U.S./State where they have never been documented or known to occur (e.g., conversion of nonnative grassland to freshwater marsh). Restoration is defined as the creation of waters of the U.S./State where they previously occurred (e.g., removal of fill material to restore a streambed). Enhancement is defined as modifying existing waters of the U.S./State to enhance functions and values (e.g., removal of exotic plant species from jurisdictional areas and replacing with native species).

E. POST-CONSTRUCTION STORMWATER TREATMENT PROVISIONS

1. All storm drain inlet structures within the project boundaries shall be stamped and/or stenciled with appropriate language prohibiting non-storm water discharges.

2. Best management practices (BMPs) shall be implemented to treat stormwater runoff from all roofs, roads, parking areas, and other impervious areas where activities are expected to generate pollutants that can be conveyed by stormwater to the storm drain system and/or waters of the State and/or U.S. Post-construction stormwater BMPs shall be designed to mitigate (infiltrate, filter, and/or treat), prior to discharging to receiving waters, the volume of runoff produced by all storms up to and including the 24-hour, 85th percentile storm event for volume-based BMPs and/or the 1 hour, 85th percentile multiplied by a factor of two for flow-based BMPs, as determined from the local historical rainfall record.

3. Post-construction BMPs shall be implemented in accordance with the *Master Area / Sub-Area Water Quality Management Plan (WQMP) for The Ranch Plan, Planning Area 1*. GeoSyntec Consultants, Inc., April 2006. Post-construction BMPs must be installed and functional prior to occupancy and/or planned use of developed areas.

4. The Discharger shall submit conceptual post-construction stormwater treatment plans for all proposed roads within the Project Area that were not considered in the *Master Area / Sub-Area WQMP*, including Cow Camp Road, Ortega Highway, Antonio Parkway, and La Pata Road. These plans shall be submitted prior to the discharge of fill associated with each road other than discharges associated with geotechnical surveys. The plans shall include maps depicting the drainage areas, BMPs, and receiving waters. The plan shall also include preliminary, or final, design criteria. An amendment to the *Master Area / Sub-Area WQMP* may be submitted for plans to direct Cow Camp Road runoff to water quality basin no. 4, provided the amendment demonstrates the basin has adequate capacity to treat the runoff.

5. The Discharger shall submit copies of project-specific WQMPs, as required in the Ranch Plan EIR, to the Regional Board as they are prepared to allow the Regional Board to assess them for consistency with this Order and to provide comments to the County of Orange.

a. Project-specific WQMPs shall describe and map the site design and treatment BMPs to be used within the project;

b. Project-specific WQMPs shall identify the entity responsible for long-term operations and maintenance of the treatment BMPs; and

c. Project-specific WQMPs shall identify stormwater and dry-weather BMPs for indicator bacteria for each project.

6. The Discharger shall provide each lot purchaser with a lot map that clearly distinguishes the location and purpose of typical stormwater site design, pollution prevention, and treatment BMP features for the Sub-Area. Each lot purchaser shall also be educated regarding pollution prevention activities.

7. All post-construction structural treatment BMPs, including, but not limited to, the extended detention basins, retention basins, vegetated swales, media filters, etc. shall be regularly inspected and maintained for the life of the project per manufacturers' specifications for proprietary structural devices and at frequencies no less than recommended by the California Stormwater Quality Association (CASQA)[2] guidance for non-proprietary measures, including the vegetated swale and the detention basins.

   a. Final maintenance plans for the vegetated swales shall be developed and implemented based on CASQA guidance;

   b. A copy of a Final Plan for operations and maintenance for all post-construction stormwater treatment BMPs shall be submitted to the Regional Board prior to initiation of post-construction discharges to receiving waters;

   c. Inspections: Flow-based treatment BMPs (e.g., media filters and vegetated swales) shall be inspected at a minimum monthly from October through April and at least twice from May through September each year. The detention basins shall be inspected at least once during the summer, once between November and March, and after every rain event in excess of one inch;

   d. Basins shall be maintained as necessary to prevent nuisance conditions, including those associated with odors, trash, and disease vectors. Nuisance maintenance shall not compromise the ability of the basins to perform water quality treatment required by this Order.

[2] California Stormwater Quality Association (*California Stormwater BMP Handbook, New Development and Redevelopment 2003)*, available on-line at: http://www.cabmphandbooks.org/

e. Records shall be kept regarding inspections and maintenance in order to assess the performance of the systems and determine whether adaptations are necessary to protect receiving waters;

f. The Discharger shall be responsible for inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to the local homeowners association or other entity;

g. At the time maintenance responsibility for post-construction BMPs is legally transferred, the Discharger shall submit to the Regional Board a copy of such documentation; and

h. At the time maintenance responsibility for post-construction BMPs is legally transferred, the Discharger shall provide the transferee with a copy of a long-term BMP maintenance plan that, at a minimum, complies with manufacturer specifications and CASQA guidance.

8. The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment C of this Order.

F. STANDARD PROVISIONS

1. The Discharger shall notify the Regional Board by telephone within 24 hours whenever an adverse condition occurs as a result of this discharge. Such a condition includes, but is not limited to, a violation of the conditions of this Order, a significant spill of petroleum products or toxic chemicals, or damage to control facilities that would cause noncompliance. Pursuant to CWC §13267(b), a written notification of the adverse condition shall be submitted to the Board within one week of occurrence. The written notification shall identify the adverse condition, describe the actions necessary to remedy the condition, and specify a timetable, subject to the modifications of the Regional Board, for the remedial actions.

2. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, shall be disposed of in accordance with applicable state and federal regulations. Sediment shall not be removed or disposed in a manner that will cause water quality degradation.

3. This Order is not transferable to any person except after notice to the Regional Board. In accordance with CWC §13260, the dischargers shall file with the Regional Board a report of any material change or proposed change in the ownership, character, location, or quantity of this waste discharge. The notice must include a written agreement between the existing and new dischargers containing a specific date for the transfer of this Order's responsibility and coverage between the current dischargers and the new discharger. This agreement shall include an acknowledgment that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.

4. Any proposed material change in operation shall be reported to the Regional Board at least 30 days in advance of the proposed implementation of any change. This shall include, but not be limited to, all significant new soil disturbances, all proposed expansion of development, or any change in drainage characteristics at the project site. For the purpose of this Order, this includes any proposed change in the boundaries of the wetland/waters of the United States fill sites. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the dischargers and incorporate such other requirements as may be necessary under the California Water Code.

4. The Discharger shall maintain a copy of this Order at the project site so as to be available at all times to site operating personnel and agencies.

5. The Discharger shall permit the Regional Board or its authorized representative at all times, upon presentation of credentials:

    a. Entry onto project premises, including all areas on which wetland fill or wetland mitigation is located or in which records are kept;

    b. Access to copy any records required to be kept under the terms and conditions of this Order;

    c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order; and

    d. Sampling of any discharge or surface water covered by this Order.

6. This Order does not authorize commission of any act causing injury to the property of another or of the public; does not convey any property rights; does not remove liability under federal, state, or local laws, regulations or rules of other programs and agencies, nor does this Order authorize the discharge of wastes without appropriate permits from other agencies or organizations.

7. The Regional Board will consider rescission of this Order upon notification of successful completion of mitigation for all creation, restoration, and enhancement projects required or otherwise permitted now or subsequently under this Order, completion of project construction, and the Regional Board's acceptance of these notifications. Determination of mitigation success will be based on the provisions discussed in Section C of this Order and in the Monitoring and Reporting Program in Attachment C of this Order.

8. The Discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; and/or (c) denial of a report of waste discharge in application for new or revised waste discharge requirements.

9. The Discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Regional Board within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Regional Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

10. The Dischargers shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

11. In an enforcement action, it shall not be a defense for the dischargers that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the dischargers shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility fails, is reduced, or is lost.

12. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

    a. Violation of any terms or conditions of this Order;

b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

13. The filing of a request by the dischargers for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

G. REPORTING AND RECORD KEEPING REQUIREMENTS

1. The Discharger shall submit copies of all necessary approvals and/or permits for the project and mitigation projects from applicable government agencies, including, but not limited to, the California Department of Fish and Game, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers, prior to the start of clearing/grading.

2. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board.

3. The Discharger shall furnish to the Regional Board, within a reasonable time, any information which the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Dischargers shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

4. Where the Discharger becomes aware that they failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.

5. All reports or information submitted to the Regional Board shall be signed and certified as follows:

   a. Reports of Waste Discharge shall be signed as follows:
      i. For a corporation – by a principal executive officer or at least the level of vice-president.
      ii. For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.

iii. For a municipality or other public agency – by either a principal executive officer or ranking elected official.

b. All reports required by this Order and other information required by the Regional Board shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
   i. The authorization is made in writing by a person described in paragraph (a) of this provision; and
   ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
   iii. The written authorization is submitted to the Regional Board.

c. All reports required by this Order and other information required by the Regional Board shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. Any person signing a document under this Section shall make the following certification:

   "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

6. The Discharger shall submit reports required under this Order, or other information required by the Regional Board, to:

   Executive Officer
   California Regional Water Quality Control Board
   San Diego Region
   Attn: 401 Program; File No. WPN:18-2006047:haasj
   9174 Sky Park Court, Suite 100
   San Diego, California 92123

H. NOTIFICATIONS

1. All information requested in this Certification is pursuant to California Water Code (CWC) section 13267. Civil liability may be administratively imposed by the Regional Board for failure to furnish requested information pursuant to CWC section 13268.

2. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the dischargers from liability under federal, state or local laws, nor create a vested right for the dischargers to continue the waste discharge.

3. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.

4. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

5. The adoption of these waste discharge requirements constitutes certification of water quality certification for the project as described in this Order pursuant to Section 401 of the Clean Water Act. The Regional Board hereby certifies that the proposed discharge from **The Ranch Plan Planning Area 1 Project** (401 project no. 06C-047) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act.

This Order becomes effective on the date of adoption by the Regional Board.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on October 11, 2006.

JOHN H. ROBERTUS
Executive Officer

Attachment A – Project Description
Attachment B – Project Area
Attachment C – Monitoring and Reporting Program
Attachment D – Fact Sheet

ATTACHMENT A TO ORDER NO. R9-2006-0104

PROJECT DESCRIPTION

Applicant:	Laura Coley Eisenberg Rancho Mission Viejo, LLC P.O. Box 9 San Juan Capistrano, CA 92693 949-240-3363 Fax: 949-248-1763
Applicant Representatives:	Tony Bomkamp Glenn Lukos Associates, Inc. 29 Orchard Lake Forest, CA 92630 949-837-0404 Fax: 949-837-5834
Project Name:	The Ranch Plan, Planning Area 1
WDID Nos.	9 000001486 (WDR for non-federal fill) 9 000001487 (401 certification for federal fill)
Project Location:	The proposed project is located in unincorporated southern Orange County. The project site lies north and south of San Juan Creek, east of the City of San Juan Capistrano in the vicinity of Antonio Parkway and Ortega Highway and immediately south of the Ladera Ranch Planned Community Lat / Long (approximate): 33° 31'42" N / -117°37'09" W
Type of Project:	Residential, commercial, open space, and transportation development.
Project Description:	**The proposed project begins implementation of the Ranch Plan, which is the long-term land-use plan for the Rancho Mission Viejo area. Planning Area 1 would convert 810-acres into 488 acres of gross residential, 84 acres for an urban activity center, and 238 acres of open space that is anticipated to be dedicated as habitat reserve area. The urban activity center includes internal roadways, local streets, some residential development, retail commercial, a wellness center, local and community parks, trails, community facilities and open space uses. Subarea plans further define land uses in five separately defined areas.** **To support the planned land uses, the proposed project would discharge fill into all waterbodies within the development area footprints outside of San Juan Creek. Minor discharges of fill**

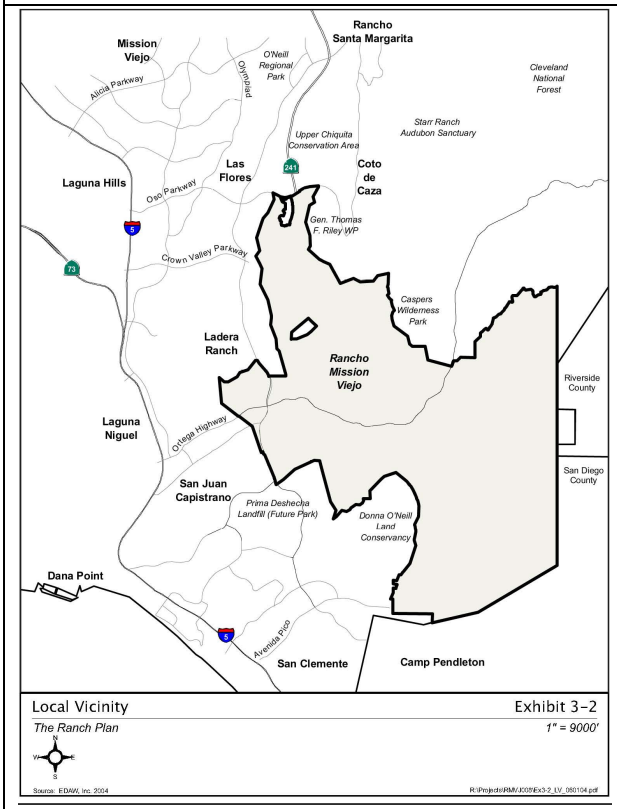
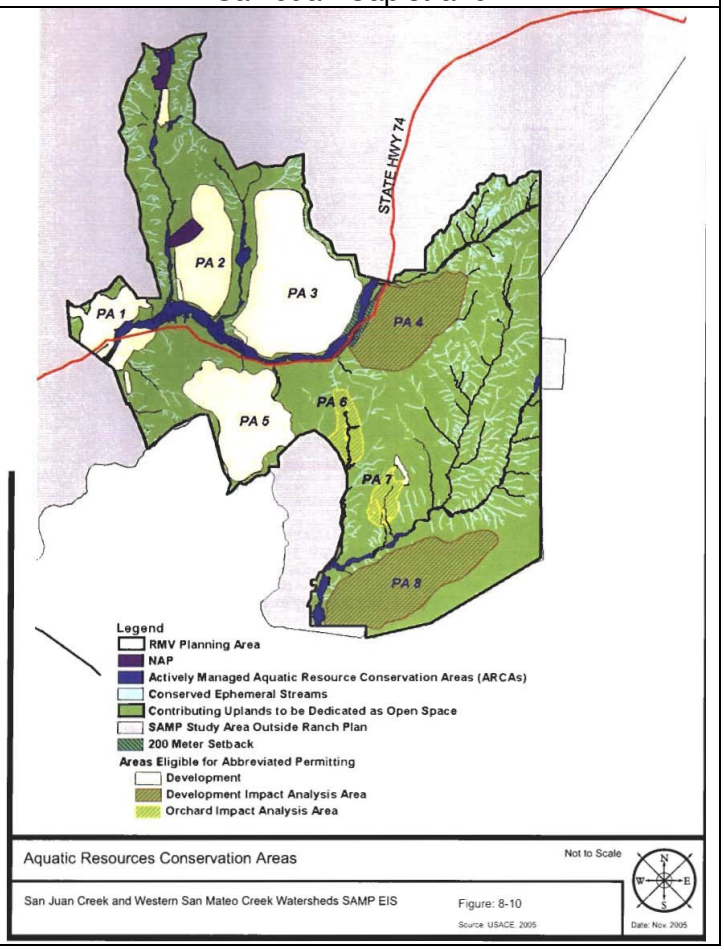
	to San Juan Creek are proposed to support infrastructure such as storm drain outfalls and roads. **The applicant proposed to discharge fill material into both waters of the U.S./State subject to Sections 404 and 401 of the Clean Water Act (CWA) and non-federal waters of the State subject to waste discharge requirements under the California Water Code, but exempt from Sections 404 and 401 of the CWA.** **The larger Ranch Plan project is part of a coordinated planning process that includes long-term watershed-based planning for natural resources led by the U.S. Army Corps of Engineers, California Department of Fish and Game, and the County of Orange. The proposed Planning Area 1 project was designed to be consistent with those resource agency plans.**
Federal Agency/Permit:	U.S. Army Corps of Engineers §404 Permits. Most proposed fills to federal waters are proposed to be authorized by Letters of Permission and/or a Regional General Permit consistent with the Special Area Management Plan (SAMP) developed for the San Juan and Western San Mateo Watersheds. Discharges of fill within Sub-Area 1.1, however, are proposed to be authorized under existing Nationwide Permit Nos. 7 and 39. A draft SAMP and the Public Notices for the proposed Section 404 permitting structure have been released, but the SAMP has not yet been approved.
Other Required Regulatory Approvals:	California Department of Fish and Game (CDFG) Streambed Alteration Agreement. Similar to the Corps procedure, the applicant is seeking a Streambed Alteration Agreement for Sub-Area 1.1 and expects the rest of the streambed alterations to be authorized by a master agreement. The CDFG has released a draft EIS for a master Streambed Alteration Agreement that would resemble the SAMP issued by the Corps.
California Environmental Quality Act (CEQA) Compliance:	**On November 8, 2004 the County of Orange approved a final Program Environmental Impact Report (EIR) for the general plan of the Ranch Plan Project (SCH no. 2003021141).**
Receiving Water:	San Juan Creek, tributaries, and non-federal waterbodies within HSA 901.28 (Ortega HSA).

Discharges of Fill to Waters of the United States:	Temporary: 3.57 acres (470 linear feet) total Wetland: 0.79 acres Riparian (identified as vegetated streambed): 2.76 acres Streambed (identified as unvegetated streambed): 0.02 acre Permanent: 2.66 acres (13,193 linear feet) total Wetland: 0.14 acres Riparian (identified as vegetated streambed): 1.93 acres Streambed (identified as unvegetated streambed): 0.59 acre
Discharges of Fill to Non-Federal Waters of the State:	Temporary: None Permanent 0.3 acre Wetland: 0.09 acre Riparian (identified as vegetated streambed): 0.03 acre Streambed (identified as unvegetated streambed): 0.18 acre
Dredge Volume:	none
Related Projects Implemented/to be Implemented by the Applicant(s):	The applicant proposes to develop the entire Ranch Plan within 20 to 25 years. Additional 401 certification and/or waste discharge requirements will be necessary.
Compensatory Mitigation:	All temporary impacts will be fully restored. Mitigation for permanent impacts is proposed at a 1:1 ratio as follows: Impacts to vegetated waters (streambed and wetlands) will be mitigated through wetland and riparian creation at the Gobernadora Ecosystem Restoration Area owned by the applicant. That mitigation has already occurred. Impacts to unvegetated waters will be achieved by enhancement within San Juan Creek within the Planning Area vicinity. Wetland: 0.25 acres Riparian: 1.96 acres Streambed: 0.77 acre Mitigation Plan for Enhancement: *Rancho Mission Viejo Invasive Species Control Plan* (Glenn Lukos Associates, Inc., July 2006).

Best Management Practices (BMPs):	Treatment BMPs will be implemented for all discharges from the proposed stormwater conveyance system. Treatment BMPs for the Planning Area include dry extended detention basins, retention basins, vegetated swales, and media filtration. Lakes may be used in place of retention basins or extended detention basins. Treatment BMPs for most roads subject to Caltrans and County jurisdiction have not been finalized, though the Discharger plans to direct runoff from Cow Camp Road to water quality basin no. 4. Treatment BMP Plan: (*Master Area / Sub-Area Water Quality Management Plan [WQMP] for The Ranch Plan, Planning Area 1*. GeoSyntec Consultants, Inc., April 2006)
Public Notice:	On June 28, 2006 receipt of the project application was posted on the Regional Board web site to serve as appropriate notification to the public.
Fees:	Total Due: $40,500 Total Paid: $40,500 (check No. 20673 and 22006)

ATTACHMENT B TO ORDER NO. R9-2006-0104

PROJECT AREA

The Ranch Plan addresses long-term planning for the Rancho Mission Viejo in unincorporated southwest Orange County.	The proposed project is Planning Area 1 (PA 1) of the larger Ranch Plan and is located adjacent to State Route 74 (Ortega Highway) east of the City of San Juan Capistrano.
	

ATTACHMENT C TO ORDER NO. R9-2006-0104

MONITORING AND REPORTING PROGRAM

1. Responsible Party Updates. Rancho Mission Viejo, LLC (Discharger) shall provide the name and contact information of any third party accepting responsibility for implementing the requirements of this Monitoring and Reporting Program. The notification shall be submitted to the Regional Board within 30 days of the transfer of responsibility. The notification shall include a signed statement from the new party demonstrating acceptance and understanding of the responsibility to meet the mitigation conditions and applicable requirements of this Program and the related conditions of Regional Board Order No. R9-2006-0104.

2. Construction Monitoring. Construction best management practices (BMPs) shall be visually monitored throughout each construction phase of the project. Monitoring shall occur, at a minimum, at all detention and retention basins and all storm drain outfall structures to receiving waters. Failures of BMP performance that result in discharges of toxic materials or significant quantities of sediment to waters of the State and/or United States, or that result in erosion of waters of the State/U.S., shall be reported to the Regional Board within 24 hours of discovery. A description of remediation efforts that were implemented shall be reported to the Regional Board within five business days of discovery.

3. As-Built Mitigation Report. The Discharger shall submit an as-built report within 60 days after complete implementation of the Invasive Control Plan mitigation. The as-built report shall contain a report of mitigation activities conducted and maps of mitigation activities, planted areas and palette, areas designated for natural plant recruitment, and any areas subject to fuel modification management. The As-Built report shall include photographs, sampling plot locations, plant species lists, site plans, and include a description of any deviations from the Habitat Mitigation Plan.

4. Invasive Species Control Plan Monitoring. The Discharger shall conduct mitigation monitoring and reporting in accordance with *The Rancho Mission Viejo Invasive Species Control Plan*, July 2006, prepared by Glenn Lukos Associates, Inc., (Invasive Control Plan), except as modified to meet the conditions of this Monitoring and Reporting Program and Regional Board Order R9-2006-0104.

    a. Mitigation monitoring as outlined in the Invasive Control Plan shall occur, at a minimum, monthly for the first year following invasive species eradication, every two months during the second year, and quarterly during years three, four, and five. Mitigation monitoring required by the Regional Board after five years shall be conducted semi-annually until mitigation is deemed successful by the Regional Board; and

b. A functional assessment of the mitigation areas shall be conducted five years following initiation of mitigation activities in order to determine status and progress toward achievement of functional benefits estimated in the *Draft Hybrid Wetland Functional Assessment* (July 2006) prepared by Glenn Lukos Associates, Inc. in support of the Planning Area 1 Project application. If the assessment cannot demonstrate that the estimated benefits have been achieved, the functional assessment shall be repeated every two years afterwards until the benefits have been demonstrated. The functional assessments shall be conducted using the same methodology as in the *Draft Hybrid Wetland Functional Assessment*.

5. Habitat Mitigation Monitoring Reports. The Discharger shall submit mitigation monitoring reports annually for at least five years and until the Regional Board provides written concurrence to the Discharger for report termination based on achievement of functional criteria. Monitoring reports shall be submitted by **March 1** each year and cover the period from January 1 through December 31 of the previous year. Monitoring reports shall include, but not be limited to, the following:

   a. Names, qualifications, and affiliations of the persons contributing to the report;

   b. A description of the progress, with a timetable for future steps, toward establishing program to provide for maintenance in perpetuity of all mitigation areas subject to the Invasive Species Control Plan pursuant to section C.6 of Order No. R9-2006-0104;

   c. A status report of the mitigation area at the Gobernadora Ecosystem Restoration Area designated as mitigation for Regional Board Order no. R9-2006-0104;

   d. Results of the annual mitigation monitoring program described in the Invasive Control Plan and results from the functional assessment conducted after the fifth year of monitoring;

   e. Tables and an analysis of the raw quantitative and qualitative data collected in the field and the following;
      i. Detritus cover;
      ii. General topographic complexity characteristics at each mitigation site;
      iii. General upstream and downstream habitat and hydrologic connectivity; and
      iv. Source of hydrology to the mitigation areas.

   f. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;

g. Photodocumentation from established reference points;

h. Qualitative comparison to adjacent preserved streambed areas;

i. Survey report documenting boundaries of mitigation area; and

j. Other items specified in the Invasive Control Plan**.**

6. Long-term Protection Mechanism. Within one year following the discharge of fill material to waters of the U.S./State, the Discharger shall provide the Regional Board with a plan and timetable for establishing a permanent protection mechanism (e.g., conservation/open space easement or deed restriction) that prohibits development, dredging, mowing, and/or other non-emergency activities that would result in permanent or temporary disturbance to beneficial uses of the mitigation area.

7. Annual Bioassessment. The Discharger shall ensure that access is provided to San Juan Creek to the County of Orange during project activities for the County's annual bioassessment monitoring in the vicinity of Ortega Highway. If the Discharger's construction or post-construction project activities prohibit monitoring access, then the Discharger shall implement a bioassessment monitoring program using the latest protocol available from the State of California Surface Water Ambient Monitoring Program (SWAMP)[3]. The monitoring frequency shall be no less than one event per year. A long-term bioassessment monitoring station shall be located at least 100 meters downstream of Ortega Highway within the Planning Area 1 boundary. Bioassessment monitoring shall be conducted for five years beginning in 2008. Reports shall be submitted annually within 120 days of sampling and shall describe the bioassessment procedures, provide the raw data, provide a summary of the data, include a map of the sampling location, and describe the status of the Planning Area 1 project.

8. Stream Monitoring Program The Discharger shall implement a Stream Monitoring Program in San Juan Creek to assess changes in geomorphology and channel shape in the Planning Area 1 project area. The Program shall be based upon the proposed program described in the Program Environmental Impact Report (EIR) for the Ranch Plan. The Program shall include topographic cross-sections, visual observations of channel bank conditions, and photographs of areas of concern that appear to be changes in the natural alluvial stream system. The Program shall require that areas of concern be assessed for feasible remedies.

   a. The Discharger shall provide a copy of the Stream Monitoring Program to the Regional Board prior to discharging fill material into any tributary to San Juan Creek; and

[3] SWAMP Information and templates are available on-line at http://www.waterboards.ca.gov/swamp/.

b. The Discharger shall provide annual Program monitoring reports to the Regional Board and the County of Orange Watershed and Coastal Resources Division by July 1 each year that cover the period from May 1 of the previous year through April 30 of the current monitoring year.

9. Stream Stabilization Program. The Discharger shall develop a Stream Stabilization Program for the Planning Area 1 project area to assess conditions of localized erosion in the vicinity of all stormdrain outfalls associated with the Planning Area 1 project. The Program shall be based upon the proposed program described in the Program EIR for the Ranch Plan. The Program shall require that areas of erosion be assessed for feasible remedies, and that a timetable be developed for remediation.

    a. The Discharger shall provide a copy of the Stream Stabilization Program to the Regional Board prior to discharging fill material into San Juan Creek; and

    b. The Discharger shall provide annual Program monitoring reports to the Regional Board by July 1 each year that cover the period from May 1 of the previous year through April 30 of the current monitoring year.

10. Annual Post-Construction BMP Effectiveness Monitoring. The Discharger shall conduct water quality monitoring of stormwater treatment BMPs as generally proposed in *Planning Area 1 – Water Quality BMP Monitoring Plan (*GeoSyntec Consultants, September 25, 2006*)* in order to assess BMP performance against expectations and water quality objectives. In addition, the Discharger shall add Dissolved Oxygen and Total Organic Carbon to the list of chemical parameters in the Plan. Monitoring shall be conducted for at least three years. Monitoring shall include the "seasonal first-flush" (first storm of the rainy season). If the first storm of the rainy season cannot reasonably be monitored (e.g., safety or mobilization impracticality), then the next storm shall be sampled.

    a. Annual monitoring shall be terminated after three years upon written concurrence from the Regional Board that the BMPs are functioning as anticipated and adequate to protect receiving waters. If monitoring data fails to demonstrate the BMPs are effective after three years, then annual monitoring shall continue for at least two additional years and until the Regional Board concurs that monitoring is no longer necessary.

b. The results shall be reported to the Regional Board by August 1 of each year and shall contain data from the preceding September through April. Each report shall contain raw and summary data, an assessment of performance against the expectations presented in the EIR, and assessment of concentrations relative to water quality objectives in the adjacent receiving water, and an assessment of the effects of the stormwater treatment BMP(s) in the drainage area. Each report shall include data in tabular and graphical form, and electronic data shall be submitted to the Regional Board upon request. Each report shall identify the sample collection procedures, including whether date was collected by grab or composite samples. A certified contract laboratory or personnel certified to conduct the specific analyses shall perform all sampling, laboratory, quality assurance, and analytical procedures;

c. Monitoring locations shall include the stormwater effluent of at least one water quality basin, if available; otherwise another BMP effluent may be selected. Hardness samples may be collected near the corresponding storm drain outfall in San Juan Creek;

d. Water quality data shall be collected during three storm events per year during the wet season (October through April). If effluent is present during the dry season (May through September), data shall be collected once per year during the dry season. Data shall be reported for the following constituents:

Parameter	**Reporting Unit**
Dissolved Oxygen	mg/L
Total Organic Carbon	mg/L
Fecal Coliform	MPNor CFU /100ml
E. Coli or Enterococcus	MPNor CFU /100ml
Total Hardness	mg/L
Nitrate Nitrogen	mg/L
Ammonia Nitrogen	mg/L
Reactive Phosphorus	mg/L
Nickel	µg/L
Zinc	µg/L
Copper	µg/L
Cadmium	µg/L
pH	in 0.1 increments
TPH-Diesel	µg/L
Total Suspended Solids	mg/L
Suspended Sediment Concentration	mg/L

Note: mg/L = milligrams per liter µg/L = micrograms per liter
MPN and CFU refer to most probable number and colony forming units, respectively, and refer to different methods for quantifying concentrations of bacteria.

11. Electronic Reporting Format. The Discharger shall submit reports required by this section in electronic format if requested by the Regional Board.

CERTIFICATION STATEMENT

Each monitoring and technical report submitted to the Regional Board shall include the following certification statement signed by the principal executive officer, ranking elected official, or duly authorized representative of that person:

> *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

NOTIFICATIONS

1. California Water Code (CWC) sections 13267(b) and 13383 authorize the Regional Board to require technical and monitoring reports.

2. Pursuant to CWC section 13268, any person failing or refusing to furnish technical or monitoring program reports as required by section 13267, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs

3. All Monitoring Reports shall be submitted to:

   Executive Officer
   California Regional Water Quality Control Board
   San Diego Region
   401 Certification; File No. NWU:18-2006047:haasj
   9174 Sky Park Court, Suite 100
   San Diego, Ca 92123

ATTACHMENT D TO ORDER NO. R9-2006-0104

FACT SHEET

TABLE OF CONTENTS

LIST OF TABLES

Attachment: Environmental Impact Report impacts and mitigation program for water resources

As described in Section A of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of Order No. R9-2006-0104.

I. SUMMARY

The California Regional Water Quality Control Board, San Diego Region, (Regional Board) is considering adoption of Order No. R9-2006-0104, establishing waste discharge requirements (WDRs) for the discharge of fill material to waters of the State by Rancho Mission Viejo (Discharger) as part of Rancho Mission Viejo Ranch Plan, Planning Area 1 project (Project) in unincorporated Orange County. Order No. R9-2006-0104 also establishes the necessary conditions on the project for the Regional Board to certify, pursuant to Section 401 of the Clean Water Act, that there is reasonable assurance Project will not reduce water quality below applicable State water quality standards. Water quality standards include beneficial uses, water quality objectives, and the State's non-degradation policy (State Water Resources Control Board Resolution No. 68-16) that calls for the protection and maintenance of existing high-quality waters.

The discharge of fill to waters of the State will cause and threaten to cause conditions of pollution and nuisance and loss of beneficial uses. Preventative and compensatory mitigation measures have been proposed, including plans for post-construction storm water management, habitat mitigation, and compliance with the statewide requirements for construction stormwater discharges. Order No. R9-2006-0104 includes requirements to implement these measures and to report on construction, post-construction, and habitat mitigation progress.

II. REGULATORY BACKGROUND

Section 13260(a) of the California Water Code (Water Code) requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, which could affect the quality of the waters of the State, file a report of waste discharge (ROWD). The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. Water Code section 13263(a) requires that WDRs be prescribed as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. Such WDRs must implement any relevant water quality control plans, taking into consideration beneficial uses to be protected, the water quality objectives reasonably required for those purposes, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.

The State of California largely relies on Section 401 of the federal Clean Water Act (CWA) (33 U.S.C. § 1341) to regulate discharges of dredged or fill material to waters of the State. That section requires an applicant to obtain "water quality certification" from California that the project will comply with State water quality standards before certain

federal licenses or permits may be issued. The permits subject to section 401 include permits for the discharge of dredged or fill materials (CWA section 404 permits) issued by the U.S. Army Corps of Engineers (Corps). WDRs under the Porter-Cologne Water Quality Control Act are typically waived for projects that are certified under Clean Water Act section 401[1]. In recent years the Corps has increasingly determined that discharges of fill to some surface waters are not subject to CWA section 404 permits. As a result, WDR waivers associated with discharges of fill subject to section 401 Certifications do not apply to discharges of fill to surface waters deemed outside of Corps jurisdiction.

To streamline the issuance of WDRs for projects that propose to place small amounts of fill into non-federal waters, the State Water Resources Control Board (State Board) issued Order No. 2004-0004-DWQ, "*Statewide General Waste Discharge Requirements for Dredge and Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction*." These General WDRs are restricted to dredged or fill discharges of not more than two-tenths (0.2) of an acre and 400 linear feet for fill and excavation discharges. In addition and pursuant to CWC section 13263(a), the Regional Boards must prescribe WDRs for proposed discharges of fill to non-federal waters that exceed the thresholds in Order No. 2004-0004-DWQ.

On May 11, 2006 the Discharger submitted an incomplete application for Section 401 Certification for discharges of fill associated with the Project. Additional information to complete the Section 401 application was received on June 2, 2006. An ROWD for the proposed fill to non-federal waters was also received on June 2, 2006. An ROWD was submitted to the Regional Board pursuant to Water Code section 13260 because the proposed amount of fill into non-federal waters of the State exceeds the numerical thresholds limit of State Board Order No. 2004-0004-DWQ. As a result, Order No. R9-2006-0104 serves as both section 401 Water Quality Certification and as waste discharge requirements for discharges of fill to waters of the State.

On June 13, 2006 the Regional Board requested that additional information be submitted to supplement the complete 401 Certification application and the ROWD. Additional information was requested following a site visit that was conducted on July 7, 2006 to inspect the non-federal waters on site and the proposed stormwater discharge points to San Juan Creek. The Discharger submitted the supplemental information on August 1, 2006.

[1] The discharge associated with a Section 401 water quality certification is regulated under California Regional Water Quality Control Board, San Diego Region, Waiver of Waste Discharge Requirements (Waiver Policy) No. 17.

III. PROJECT DESCRIPTION

The proposed project is to develop Planning Area 1 of the Ranch Plan. Planning Area 1 is the first planning area within the larger Ranch Plan proposed to be developed. The Ranch Plan area is one of the last large tracts of undeveloped land in Orange County. Development of the Ranch Plan is proposed to occur over a period of approximately 20 to 25 years. Additional waste discharge requirements and/or section 401 certification will be required for the development of subsequent Planning Areas.

The Ranch Plan

The approximately 22,815-acre Rancho Mission Viejo (the "Ranch Plan") site is located in southeastern Orange County and constitutes the remaining undeveloped portions of Rancho Mission Viejo located within unincorporated Orange County (Figures 1 and 2). The planned community of Ladera Ranch and the cities of Mission Viejo, San Juan Capistrano, and San Clemente border the project site on the west. The City of Rancho Santa Margarita borders the northern edge of the project site; the United States Marine Corps Base (MCB) Camp Pendleton in San Diego County borders the southern edge; and Caspers Wilderness Park and the Cleveland National Forest, as well as several private properties in Riverside and San Diego counties, border the site on its eastern edge. Within the Ranch Plan site are several major public facilities and utilities, including the Santa Margarita Water District (SMWD) Chiquita Water Reclamation Plant, located in Chiquita Canyon. Several creeks are located within the boundaries of the Ranch Plan. Just north of Ortega Highway, San Juan Creek flows in an east-west direction through the site. San Juan Creek is a major drainage basin that discharges into the Pacific Ocean in the vicinity of the City of Dana Point. Major tributaries to San Juan Creek are Arroyo Trabuco, Oso Creek, Cañada Chiquita, Cañada Gobernadora, Bell Canyon Creek, and Verdugo Canyon Creek. Cristianitos Creek is located south of Ortega Highway and traverses the project site in a north-south direction. Major tributaries to Cristianitos Creek within the project site are Gabino Canyon Creek, La Paz Creek, and Talega

The Ranch Plan proposes up to 14,000 dwelling units, as well as retail, office, and recreational uses, within a development area of approximately 7,694 acres. The remaining 15,121 acres would be retained in open space. Infrastructure would be constructed to support all of these uses, including road improvements, utility improvements, and schools. Ranching and agricultural activities would be retained within a portion of the proposed open space area.

Planning Area 1 (proposed project)

Planning Area 1 is one of eight delineated planning areas that comprise the Ranch Plan project. Planning Area 1 includes 810 acres located east of the City of San Juan Capistrano in the vicinity of Antonio Parkway and Ortega Highway and immediately south of the Ladera Ranch Planned Community. Ortega Highway traverses the southern portion of the planning area in a southwest to northeast direction. Antonio

Parkway traverses the planning are in a generally north-south direction. San Juan Creek bisects the planning area.

Existing land uses with planning area 1 (Project area) include ranching, agriculture, equestrian corrals, and nursery operations. The land use plan for the 810-acre project area includes 488 acres of gross residential, 84 acres for an urban activity center, and 238 acres of open space that is anticipated to be dedicated as habitat reserve area (Figure 3). The urban activity center includes internal roadways, local streets, some residential development, retail commercial, a wellness center, local and community parks, trails, community facilities and open space uses. Subarea plans further define land uses in five separately defined areas.

In addition to the development within the Planning Area, the Discharger is seeking authorization to discharge fill to accommodate roadways that extend beyond the development boundary. These projects include widening Ortega Highway, Antonio Parkway, and La Pata Avenue and constructing Cow Camp Road.

Description of Waters and Fill Activities

The proposed Project would preserve San Juan Creek though the project area, while effectively eliminating all waters of the State and U.S. within the Project's footprint areas. This is consistent with the Special Area Management Plan (SAMP) for aquatic resources being lead by the U.S. Army Corps of Engineers (Corps) for the area[2]. The purpose of the SAMP process is to identify the most valuable surface water resources in the area and then guide future development permitting in a way to provide for the sustainable existence of the aquatic resources. In practice, the Corps would use the SAMP to streamline Clean Water Act Section 404 permitting in the area. In other words all aquatic resources within the development footprints would be filled in exchange for large-scale preservation of key areas (Figure 5).

The Project site contains 13 distinct water features subject to U.S. and/or State jurisdiction within the footprint that would be eliminated. In addition, small portions of San Juan Creek would receive temporary or permanent fills in order to provide infrastructure such as stormdrain outfalls and roadways (Figure 4). The Discharger proposes to place fill material into 6.53 acres (13,663 linear feet) of waters of the State. Of that, 3.57 acres (470 linear feet) are temporary, meaning that the discharge area will be restored to conditions supportive of beneficial uses. The remaining 2.96 acres are considered discharges of fill that will permanently eliminate the affected waterbodies. The discharge of fill to 6.23 of the 6.53 acres (12,449 linear feet) requires permitting subject to sections 401 and 404 of the federal Clean Water Act [33 USC 1342 & 1344] because the fill locations were determined by the Corps to be federal waters of the U.S. The discharge of fill to the remaining 0.30 acres of waters of the State (1,214 linear feet) was determined by the Corps to be outside of federal jurisdiction and is, therefore,

[2] *San Juan Creek and Western San Mateo Watershed Special Area Management Plan*, November 2005. U.S. Army Corps of Engineers, Los Angeles District.

subject to permitting from the State, but not the Corps. All discharges to the non-federal waters are considered permanent. Table 1 outlines the proposed permanent and temporary fill associated with the development and permanent infrastructure.

Table 1. Acres of Proposed Fill

Jurisdictional Waters	Planning Area Development Permanent Discharges	Permanent Infrastructure Outside of Development Planning Area (e.g., roads)	Total Area of Permanent Discharges	Area of Temporary Discharges	Total Temporary and Permanent Discharge
Federal Wetland	0.04	0.1	0.14	0.79	0.93
Federal Non-Wetland (Vegetated and unvegetated)	2.37	0.15	2.52	2.78	5.30
Total Federal	**2.41**	**0.25**	**2.66**	**3.57**	**6.23 acres (12,449 linear feet)**
State-Only Wetland	0.09	0.00	0.09	0.00	0.09
State-Only Non-Wetland (Vegetated and unvegetated)	0.21	0.00	0.21	0.00	0.21
Total State-Only	**0.30**	**0.00**	**0.30**	**0.00**	**0.30 acres (1,214 linear feet)**

IV. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Before the Regional Board can issue an affirmative water quality certification, it must be provided a final, valid environmental document meeting the criteria of the California Environmental Quality Act (CEQA). The CEQA document must fully disclose the potential significant adverse impacts of the project and identify measures to avoid, minimize, rectify, reduce or compensate for the impacts identified and to include a monitoring and reporting program to ensure compliance with the proposed mitigation measures.

According to the CEQA Guidelines "mitigation" includes any of the following:

1. Avoiding the impact altogether by not taking an action or part of an action;

2. Minimizing the impact by limiting the degree or magnitude of the action;

3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

4. Reducing or eliminating the impact over time by preservation or maintenance actions; or

5. Compensating for the impact by providing replacement or substitute resources or environments.

Program EIR

In November 2004, the County of Orange certified a Program Environmental Impact Report (EIR No. 589, State Clearinghouse No. 2003021141) that was prepared to address the potential environmental impacts associated with developing the proposed Ranch Plan project. This Program EIR is further intended to serve as the primary environmental document for all future entitlements associated with the proposed Ranch Plan project including all discretionary approvals requested or required for project construction and operation. A lead agency can approve subsequent actions without additional environmental documentation unless otherwise required by Public Resources Code Section 21166, and CEQA Guidelines §§15162 and 15168.

The EIR describes potential significant environmental effects of the proposed project, measures to mitigate project impacts to the extent feasible, and the expected status of effects following the implementation of the mitigation program. The mitigation program is comprised of project design features (PDF), standard conditions and regulations, and mitigation measures, which all serve to reduce potential environmental impacts.

CEQA requires that areas of controversy or unresolved issues be identified up front as part of the EIR. As described in the EIR, the Ranch Plan EIR is a Program EIR that addresses a comprehensive land and conservation program at a General Plan and zoning level, and discusses a number of components for which final design has not occurred. These types of unresolved issues would be resolved during the plan implementation and subsequent approval process. Examples include the final size and design of water quality/retention basins, specific residential product types, development amenities, and internal trail network and design layouts. The components have been designed at a conceptual level for purposes of analysis in the Program EIR. Final details would be provided and evaluated when Area Plans and tentative tract maps are processed.

At the time of CEQA approval from the County for the Ranch Plan, therefore, final stormwater management and biological resource mitigation plans had not been developed. The EIR requires deferred development of the specific plans to mitigate various potential significant adverse impacts associated with each Planning Area. For instance, the Program EIR relies on a Conceptual Water Quality Management Plan (WQMP) for the entire Ranch Plan area, but it requires that three additional levels of WQMPs be prepared in conjunction with the County's project review process. The more specific levels of WQMP development include a Master Area Plan WQMP for each Planning Area, a Sub-Area Plan WQMP, and the final project-specific WQMP. Each of the later WQMPs must conform to the Conceptual WQMP that was prepared for the EIR, but with additional details applicable to the design phase.

The Program EIR identified mitigation measures to reduce project impacts to water quality and beneficial uses. Some mitigation measures require the development of plans at the Planning Area level, others at the Sub-Area or project-specific level. Some mitigation measures apply to specific Planning Areas. The identified Project impacts and required mitigation measures for water resources are summarized in Attachment 1. The Program EIR states that after implementation of the mitigation measures, all water resource impacts are reduced to a level of less than significant, except for pathogens.

The Discharger has proposed mitigation for the impacts to waters of the State and beneficial uses that are consistent with the required EIR mitigation measures. Although the EIR deferred development of the mitigation plans, the Regional Board has reviewed the mitigation plans developed specifically for Planning Area 1 (the Project area) and the Order will require further refinement as appropriate to ensure water quality standards are protected.

Coordinated Planning Process and Planning Principles

The Ranch Plan has been developed as part of an ongoing coordinated public planning process that anticipates the preparation of two other major planning and regulatory programs. The first is the Southern Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which is being prepared by the County of Orange in cooperation with the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS). The second major planning effort is a Special Area Management Plan/Master Streambed Alteration Agreement (SAMP/MSAA), which addresses impacts to aquatic resources subject to the requirements of the federal Clean Water Act (CWA) (Section 404) and the state Fish and Game Code (Sections 1600-1603). The entire Ranch Plan area is within the planning areas for the other two programs.

All three planning processes (General Plan EIR, SAMP, and NCCP) were developed in consideration of a set of Watershed and Sub-Basin Planning Principles[3] that were

[3] The Draft Watershed and Sub-Basin Planning Principles are included in the Ranch Plan Program EIR as Appendix G-3.

created by a NCCP/SAMP working group. These principles provide a framework for planning based on biologic, hydrologic, and geomorphic conditions. This is a significant departure from typical urbanization planning in southern California and represents a significant step toward predicting the effects to aquatic resources from development scenarios. As a result, planners involved in the coordinated planning process were able to guide future development zones toward areas that would result in a manner that would minimize the cumulative effects on aquatic resources.

The County of Orange certified the Ranch Plan Program EIR before the other two planning documents were finalized. In doing so, it recognized that there could be conflict with coordination of the other ones. In December 2004 two separate actions were filed in the Orange County Superior Court challenging the approval of the EIR. One was filed by the City of Mission Viejo and one was filed by a coalition of non-governmental organizations (Superior Court Case nos. 04CC01637 and 04CC11999, respectively). The parties reached full settlements and the lawsuits have been dismissed. The Ranch Plan was modified by the Discharger so that the outline of the Planning Areas would closely resemble the expectations of the SAMP and NCCP documents.

Draft Environmental Impact Statements (EIS) have been released for the SAMP and NCCP. The draft EIS for the SAMP was released by the U.S. Army Corps of Engineers (Corps) in January 2006, and the Corps has closed the public comment period. The draft EIS for the NCCP has been published and the comment period will close on September 18, 2006. The Corps expects to complete a final EIS for the SAMP once the NCCP is completed.

V. WATER QUALITY STANDARDS AND MITIGATION MEASURES

Section 303 of the federal Clean Water Act (33 U.S.C. §1313) defines the term water quality standards as the uses of the surface waters, the water quality criteria which are applied to protect those uses, and an antidegradation policy[4]. A water quality standard defines the water quality goals for a water body by designating the use or uses to be made of the water body, by setting criteria to protect the uses, and by protecting water quality through non-degradation provisions. Under the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Chapter 2 §13050), these concepts are defined separately as beneficial uses and water quality objectives. Beneficial uses and water quality objectives are required to be established for all waters of the State, both surface and ground waters.

[4] Pursuant to the federal Clean Water Act, water quality standards are composed of three parts: (1) designated uses, e.g., protection of fish and wildlife, recreation and drinking water supply (40 C.F.R. 131.10); (2) numeric or narrative water quality criteria to protect those uses (40 C.F.R. 131.11); and (3) an antidegradation policy (40 C.F.R. 131.12).

The larger Ranch Plan area is within both the Mission Viejo Hydrologic Area (HA 901.30) and the San Mateo Canyon Hydrologic Area (HA 901.40) of the San Juan Hydrologic Unit. The Project area for Planning Area 1 (Project area) includes San Juan Creek and surface waters within the Ortega Hydrologic Subarea (HSA 901.28).

Designated beneficial uses of inland surface waters within HSA 901.28 include the following: Agricultural Supply (AGR), Industrial Service Supply (IND), Contact Water Recreation (REC 1), Non-contact Water Recreation (REC 2), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), and Cold freshwater habitat (COLD). In addition, San Juan Creek within the project area is used by threatened and/or endangered species that qualify for the RARE beneficial use. Designated beneficial uses of ground waters in the project area include Domestic Supply (MUN), Agricultural Supply (AGR), and Industrial Service Supply (IND).

Thirteen waterbody features (sum of federal and non-federal waters) would be completely filled to support the proposed project. This represents all the first and second-order waterbodies within the planning bubble. The fill will eliminate beneficial uses of those waterbodies. Indirect effects to water quality and beneficial uses within San Juan Creek may also be expected downstream of fill discharges because of lost upstream pollutant assimilative capacity and infiltration and the hydromodification effects of converting the stream network into a stormwater management system. A quantitative functional analysis for the Project area concluded that the waterbodies to be filled in currently provide variable levels of water resource functions[5].

The Project also proposes some modifications to San Juan Creek. The discharge of material within San Juan Creek to create stormdrain outfalls and energy dissipation may degrade WARM and WILD beneficial uses because riprap is typically a lower quality substrate than natural channel beds for vegetation and wildlife. Stormwater and dry-weather discharges to San Juan Creek also have the potential to affect water quality, sediment transport, and the flow regime, all of which could negatively impact beneficial uses if not mitigated.

The Project proposes to use infiltration-based practices (e.g., detention and retention basins) to treat potential pollutants in stormwater and dry-weather runoff in certain areas. Any drainage feature that infiltrates runoff poses some risk of potential groundwater contamination. Although dependent on several factors, the risks typically associated with properly managed infiltration of runoff (especially from residential land use areas) are not significant. The risks associated with infiltration can be managed by many techniques, including (1) designing landscape drainage features that promote infiltration of runoff, but do not “inject” runoff (injection bypasses the natural processes of filtering and transformation that occur in the soil); (2) taking reasonable steps to prevent the illegal disposal of wastes; and (3) ensuring that each drainage feature is adequately maintained in perpetuity. The Discharger expects that the proposed BMPs will be sufficient to protect the quality of groundwater, but does note that infiltration of

[5] *Draft Hybrid Wetland Functional Assessment.* Glenn Lukos Associates, July 2006.

runoff may lead to increased groundwater discharges to San Juan Creek (e.g., increased baseflows). Minimum conditions needed to protect groundwater and assess potential effects to San Juan Creek are specified in Order No. R9-2006-0104.

Order No. R9-2006-0104 establishes requirements to implement mitigation plans in order to avoid, minimize, rectify, reduce, or compensate for the impacts to water resources associated with the planned discharges of fill to waters of the State/U.S. Those requirements include restoration and enhancement of water resources and the use of best management practices to protect receiving waters from pollutants in stormwater discharges.

Impaired Water Bodies

No waterbodies within the Project area are on the current Clean Water Act Section 303(d) list of impaired waterbody segments, but San Juan Creek further downstream of the project area is listed for bacteria indicators. Bacteria indicators threaten attainment of the REC-1 and REC-2 beneficial uses. The project area currently supports agriculture, nursery, and grazing operations that may contribute nonpoint pollution sources of indicator bacteria to San Juan Creek. The proposed Project will likely eliminate some of those sources and add sources related to urban land uses.

The Program EIR concludes, however, that proposed draft mitigation measures may not reduce the impacts to water resources from pathogens to below a level of significance. Consistent with the EIR, measures have been proposed by the Discharger at the Planning Area and Sub-Area levels to mitigate excessive indicator bacteria and pathogen loadings to San Juan Creek from the proposed Project development. These measures include site design, source control, and treatment management practices (BMPs) as proposed in the *Master Area / Sub-Area Water Quality Management Plan (WQMP) for the Ranch Plan Planning Area 1*, Geosyntech Consultants, Inc. April 2006).

The proposed Project WQMP has been designed with consideration for a draft Total Maximum Daily Load (TMDL) for all inland surface waters impaired by indicator bacteria recently developed by the Regional Board. The TMDL will establish waste load allocations for the urban areas contributing sources of bacteria to the impaired waterbodies. The TMDL proposes to set separate numerical targets for dry weather and wet weather conditions. The WQMP identifies bacteria as a pollutant of concern and proposes site design, source control, and treatment best management practices (BMPs) to address potential bacteria and pathogen discharges. To complement site design and source control BMPs, the WQMP is designed to prevent excessive discharges of dry-weather runoff to San Juan Creek by the use of basins that allow for either infiltration of dry-weather flows or will store runoff for irrigation use. The WQMP recognizes that the proposed BMPs will likely not prevent the discharges of bacteria to San Juan Creek during storm events. In addition, the BMPs were selected to prevent discharges of loads that would likely result in exceeding the proposed wet-weather numerical criteria of the TMDL.

Habitat Creation and Enhancement

Habitat mitigation for the proposed Project would be implemented through an *Aquatic Resources Habitat Restoration* Plan prepared for the EIR and SAMP. Permanent loss of wetland habitat and other vegetated waters (e.g., streambeds that have either non-wetland vegetation or non-wetland soils) would be mitigated through dedication of wetland acreage at the existing Gobernadora Ecological Restoration Area (GERA). Compensatory mitigation for permanent loss of non-wetland waters is proposed to consist of removal of exotic, invasive vegetation from San Juan Creek in accordance with the *Rancho Mission Viejo Invasive Species Control Plan* (July 13, 2006, Glenn Lukos Associates, Inc.). The Invasive Species plan was developed for the SAMP.

The GERA is a riparian and wetland habitat creation site within lower Canada Gobernadora that was established in 1994 by the Discharger during development of an earlier project (The Ladera Community, 401 Certification no. 98C-022). The created mitigation area was oversized to allow it to be used for future, planned mitigation needs (Figure 6). GERA as wetland mitigation is proposed because of the successful development of wetlands there, which have attracted endangered species. In 2004, the Corps determined that the compensatory mitigation for the Ladera project was successful and that any additional created wetlands at GERA could be used for future mitigation. The Corps' Draft SAMP estimates that implementation of the entire Ranch Plan will use up all the unallocated wetland mitigation areas at GERA. Invasive species removal is proposed to mitigate for non-wetland fills because the SAMP process identified the eradication of exotic, invasive species in San Juan Creek and tributaries as a high priority for meeting the SAMP objectives of long-term viability of the aquatic resources.

The Discharger has prepared a *Draft Hybrid Wetland Functional Assessment* (July 2006, Glenn Lukos Associates, Inc.) in support of the proposal to implement an invasive species control plan in San Juan Creek as mitigation for direct fill to low-order streambeds. This model was prepared at the request of the Regional Board to provide a quantitative demonstration that invasive species removal would compensate for the elimination of numerous ephemeral streambeds. The hybrid assessment is a model that uses variables from several quantitative assessment techniques. The assessment was first submitted with the 401 application package, and then resubmitted following comments to slightly revise the model parameters. Pre-project and post-project conditions are evaluated. The revised assessment shows that the proposed invasive species control program would result in a functional gain that exceeds the lost functions of the eliminated unvegetated streambeds. The streambeds proposed to be filled by the project have been subject to disturbance from previous agricultural and grazing land uses.

The Discharger has proposed mitigation acreage ratios of 1:1 for all areas of fill. This is reasonable for the wetland component given the high quality of the GERA wetlands. The Discharger has also demonstrated through the functional assessment that such a ratio for invasive species removal will provide more than a 1:1 functional replacement

for the loss of the on-site streambeds. In addition, implementation of the SAMP will ensure that the highest value aquatic resources in the Ranch Plan are maintained in a manner that will ensure long-term viability. Without the comprehensive planning efforts that provide the context for the mitigation program, invasive species removal would likely not be an acceptable mitigation proposal for the significant loss of streambeds.

The objectives of the Invasive Species Control Plan (Invasive Plan) is to identify, eradicate, and provide long-term adaptive management measures for abating the effects of invasive species in the Ranch Plan area. The Invasive Plan is one element of the overall Adaptive Management Program developed by the Discharger to comply with the terms of the SAMP and NCCP[6]. As a result, the Discharger's development plans include a funding mechanism for the long-term monitoring and maintenance of the proposed mitigation areas for Planning Area 1 and the rest of the Ranch Plan. Long-term success of invasive eradication will also require cooperation from entities that control the upper portions of watersheds within the Ranch Plan area. Those entities include the County of Orange (Caspers Regional Park and unincorporated developed area of Coto de Caza), the National Audubon Society (Starr Ranch), and the Cleveland National Forest.

The proposed mitigation is consistent with requirements of the conservation strategy identified in the Program EIR as mitigation measures for impacts to biological resources. The EIR requirements include a monitoring program to ensure that the conservation strategy is successful. The Monitoring and Reporting Plan for Order No. R9-2006-0104 is based on the proposed monitoring plan.

The Discharger will retain ownership of all areas proposed to be dedicated as open space, including the proposed streambed mitigation site and other preserved streambeds (and vernal pools). The Discharger will be responsible for the long-term management and oversight of the open space of the Ranch Plan through implementation of the NCCP. Provided the funding mechanism is adequate to implement the conservation strategy outlined in the EIR, there is a reasonable expectation for success.

<u>Compliance with National Pollutant Discharge Elimination System (NPDES) Requirements for the Discharge of Pollutants in Urban Runoff and Stormwater</u>

The proposed project may threaten beneficial uses through the discharge of pollutants into tributaries of and directly to San Juan Creek in urban runoff and stormwater (e.g., oil and grease, sediments, heavy metals, pathogens, nutrients, trash, etc.) during project construction and the subsequent proposed land use. The Discharger proposes to mitigate the potential threats to beneficial uses by implementing appropriate

[6] The *Adaptive Management Program* is included as Appendix J to the Program EIR. It includes the following components: Plant Species Translocation, Propagation and Management Plan; Habitat Restoration Plan; Invasive Species Control Plan; Grazing Management Plan; and a Fire Management Plan. The Invasive Species Control Plan is also included in the November 2005 Draft EIS for the SAMP as Appendix F.

construction and post-construction plans that rely on the use of best management practices (BMPs) consistent with NPDES requirements. A monitoring program has also been proposed to assess hydrologic conditions of concern from discharges of stormwater.

During construction, the Project will be subject to State Board Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, *Waste Discharge Requirements (WDRs) For Discharges Of Storm Water Runoff Associated With Construction Activity*. The Order calls for compliance with Order No. 99-08-DWQ. CEQA mitigation provisions require the Discharger to develop and implement an erosion control plan with appropriate measures to restrict sediments from leaving the site and to mitigate the effect of increased runoff at points of discharge.

Stormwater Treatment. The Discharger has proposed to implement a plan for the management of post-construction stormwater discharges associated with the proposed project (*Master Area / Sub-Area Water Quality Management Plan [WQMP] for the Ranch Plan Planning Area 1*, April 2006, Geosyntec Consultants, Inc). Treatment BMPs proposed in the WQMP for Planning Area 1 include dry extended basins, retention basins and/or lakes; vegetated swales; bioretention areas; and media filtration (Figure 7). The WQMP lays out two options one portion of the project, in which a lake would replace swales and a detention basin in a portion of Sub-Area 1.1. Per the Program EIR, project-specific WQMPs will be developed as project details are refined for approval by the County of Orange in accordance with the municipal NPDES requirements. In addition a suite of site design and source control BMPs are proposed in the WQMP. The following table lists the proposed BMPs.

Table 2. Proposed Water Quality Best Management Practices (BMPs)

BMP Class	Proposed Water Quality BMP
Site Design	• Minimize impervious area / maximize permeability • Minimize directly connected impervious areas • Conserve natural areas • Create reduced or "zero discharge" areas (runoff volume reduction)
Source Control	• Storm drain stenciling • Design trash storage areas to reduce pollutant introduction • Use efficient irrigation systems and landscape design • Protect slopes and channels
Treatment	• Extended detention basins • Retention basins / lakes • Vegetated swales • Bioretention areas • Media filtration

The post-construction BMPs for stormwater discharges proposed by the Discharger and required by Order R9-2006-0104 are generally consistent with the current municipal NPDES requirements for the County of Orange in Regional Board Order No. R9-2002-0001[7]. Specifically, a combination of site design, source control, and treatment BMPs have been proposed. The treatment BMPs have been designed to mitigate, prior to discharging to receiving waters, the volume and/or flow-based numerical criteria established within the municipal NPDES permit requirements.

Post-construction treatment plans submitted by the Discharger for several of the proposed road projects outside the Planning Area development boundary lacked the level of detail and analysis provided for the development boundary in the WQMP for Planning Area 1. The Order requires conceptual treatment BMP plans for these roads be submitted for review before discharges associated with their construction commence.

Hydrologic Conditions of Concern. Hydrologic conditions of concern following construction include: Increased stormwater runoff velocities, volumes, and duration; Decreased infiltration and groundwater recharge; and Changed base flow. The potential for hydrologic conditions of concern in San Juan Creek were evaluated for the Project and considered not significant because the creek's geomorphic and hydrologic conditions in the Project area are driven by large-scale watershed processes. In order to verify that conclusion, the Discharger has proposed to implement a stream stability /

[7] Order No. R9-2002-0001, NPDES No. CAS0108740, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of Orange, The Incorporated Cities Of Orange County, and the Orange County Flood Control District within the San Diego Region.

geomorphology monitoring program in the vicinity of the stormdrain outfalls. This program is identified in the Program EIR as a Stream Monitoring Program[8]. Corrective measures would be implemented if monitoring results indicate the discharges are destabilizing streambed or riparian habitat. Order No. 2006-0104 requires implementation of the proposed stream monitoring program.

[8] The Stream Monitoring Program is described as Mitigation Measure 4.5-8 of the Water Resources section in the Program EIR.

Attachment 1 to Fact Sheet

Summary of Significant Impacts to Water Resources as identified in Table 1.7-1 of the Program EIR.

Impacts to Water Resources
Development of the project will result in increases in the rate and amount of surface flow runoff within certain portions of the developed watershed(s). However, these increases are relatively small and will be fully mitigated through the use of flood control detention basins. Development of the project may result in reduced coarse sediment yields within certain sub-basins, especially during construction periods. However, these decreases are relatively minor when comparing existing and post-construction conditions. In the absence of mitigation, development of the project would alter certain in-channel sediment transport processes, potentially affecting streambed/stream bank stability. In the absence of mitigation, development of the project would have significant adverse impacts on storm water quality vis-à-vis increases in certain pollutants of concern, impacts to groundwater quality and increases in stream temperature. Implementation of the project will result in significant and unavoidable impacts in the amount of pathogens entering into stormwater runoff. In the absence of mitigation, implementation of the project would adversely impact water balance (i.e., inflows –versus- outflows) within the affected watershed(s) and sub-basins.

Mitigation Program Summary for Water Resources
1. Project Design Features The Watershed Planning Principles, developed as part of the NCCP/HCP and SAMP/MSAA, were utilized as a framework to minimize project impacts. Sufficient storage area is provided for runoff volumes to mitigate increases in peak discharges and to offset impacts of existing development. A conceptual Water Quality Management Plan (the Draft WQMP) has been developed for the proposed project in compliance with the County of Orange DAMP. Water captured in the water quality control system and in detention facilities, will be used, where possible, as a supplemental source of irrigation water.
2. Standard Conditions The following drainage studies shall be submitted to and approved by the Manager, Subdivision and Grading: a drainage study of the project, a study evidencing that drainage patterns will not overload existing storm drains, and studies indicating how grading and drainage systems will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood.

The project applicant shall design provisions for surface drainage; design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and dedicate the associated easements to the County of Orange, if determined necessary. These improvements shall be constructed in a manner meeting the approval of the Manager, Construction.

The applicant shall design provisions for surface drainage, design all necessary storm drain facilities, and dedicate the associated easements to the County of Orange. These improvements shall be constructed in a manner meeting the approval of the Manager, Construction.

The subdivider shall participate in the applicable Master Plan of Drainage including payment of fees and the construction of the necessary facilities.

The subdivider shall not grant any easements over any property subject to a requirement of dedication or irrevocable offer to the County of Orange or the Orange County Flood Control District, unless such easements are expressly made subordinate to the easements to be offered for dedication to the County. Prior to granting any of said easements, a copy of the proposed easement shall be submitted for review and approval.

The applicant shall improve Regional Facilities as deemed necessary and appropriate by the Orange County Flood Control District.

The applicant shall submit a Runoff Management Plan for review and approval.

A WQMP identifying BMPs to control pollutant runoff shall be submitted for review and approval. The WQMP shall identify structural and non-structural measures specified in the current DAMP.

Compliance with the WQMP requirements shall be demonstrated, including implementation, construction, and installation of all structural BMPs, compliance with all non-structural BMPs, submission of an (O&M) Plan for all structural BMPs for review and approval, availability of copies of the project's approved WQMP for incoming occupants; agreement to pay for a Special Investigation from the County of Orange 12 months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan; and agreement to and recordation of one of the following: CC&R's; a water quality implementation agreement; or the final approved WQMP and O&M Plan.

Prior to the issuance of any grading or building permits, the applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the NOI and a copy of the subsequent notification of the issuance of a WDID Number or other proof of filing. Projects subject to this requirement shall prepare and implement a SWPPP.

Prior to the issuance of any grading or building permit, the applicant shall submit an ESCP to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify proper coverage, storage, and security of construction and grading materials and waste to prevent transport into local waters.

3. Mitigation Measures

A detailed Runoff Management Plan ("ROMP") shall be prepared that covers the entire Ranch within the regional watersheds and sub-watersheds and is consistent with applicable Orange County criteria and OCHM and FCDM criteria. The ROMP shall separately cover the San Juan Creek watershed to the downstream boundary of the Ranch or the San Mateo Creek watershed to the County border and be independent from the preliminary analyses submitted as part of the GPA/ZC submittals. The ROMP shall verify that development of the Ranch Plan will not produce adverse hydraulic impacts during flood events, provide analysis of sufficient detail to evaluate and establish the size and alignment of flood control and storm drain facilities, and site selection choices for the retarding basins, water quality detention basins and other mitigation measures.

A Master Plan of Drainage ("MPD") shall be prepared showing all flood control, storm drain, and water quality features within the affected watershed(s).

A Master Area Plan WQMP shall be prepared consistent with the terms and content of the Draft WQMP and that provides detail for application within the individual Master Area Plans, including BMPs, facility sizing and location, and BMP operation and maintenance.

A Sub-Area Plan WQMP shall be prepared consistent with the terms and content of the Draft WQMP and that provides detail for application within the individual Sub-Area Plans, including BMPs, facility sizing and location, and BMP operation and maintenance.

Flood control detention facilities shall be constructed to provide hydrologic mitigation for increases in peak discharges. The detention basins will be designed as "off-line" from most of the major stream channels. Maintenance standards will be established for maximum depth of accumulated sediment in the forebay basins prior to removal. The outlet structure will be configured to control a wide range of flows, providing flow management from the 2- to 100-year flow event. It will also include an overflow spillway and a subdrain to ensure complete drainage within several days following a flow event.

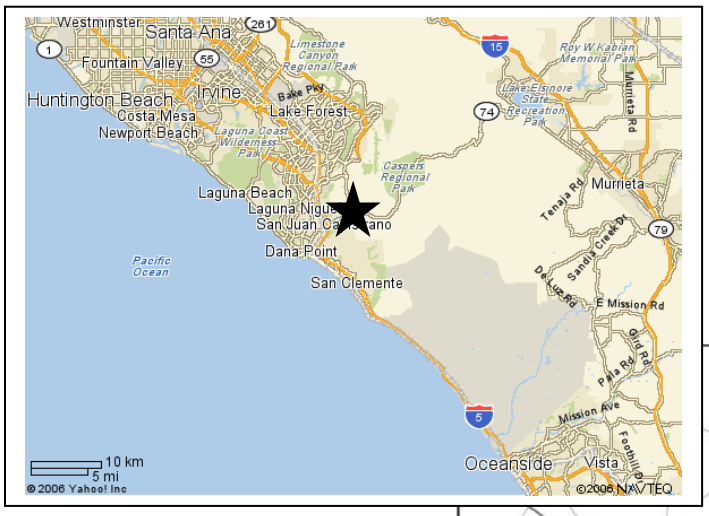
All developments will be designed in order to achieve flow duration matching, address the water balance, and provide for water quality treatment through a combined flow and water quality control system (termed combined control system).

A stream stabilization program shall be prepared that will be implemented by the HOA or other responsible entity to mitigate effects of local erosion associated with drainage system outlets from the development or downstream of detention basins.

A stream monitoring program shall be developed prior to the construction within the watershed which will include reporting requirements in order to observe changes in the natural alluvial stream system. The minimum program will include and address Stream Walks, Major Stream Cross Sections Monitoring, periodic aerial photography, evaluation of changes downstream of ponds and basins, and supplemental assessments.

Figure 1
Regional Location

The Ranch Plan project is located in unincorporated Orange County, east of San Juan Capistrano. The "stars" denotes approximate Planning Area 1 project.



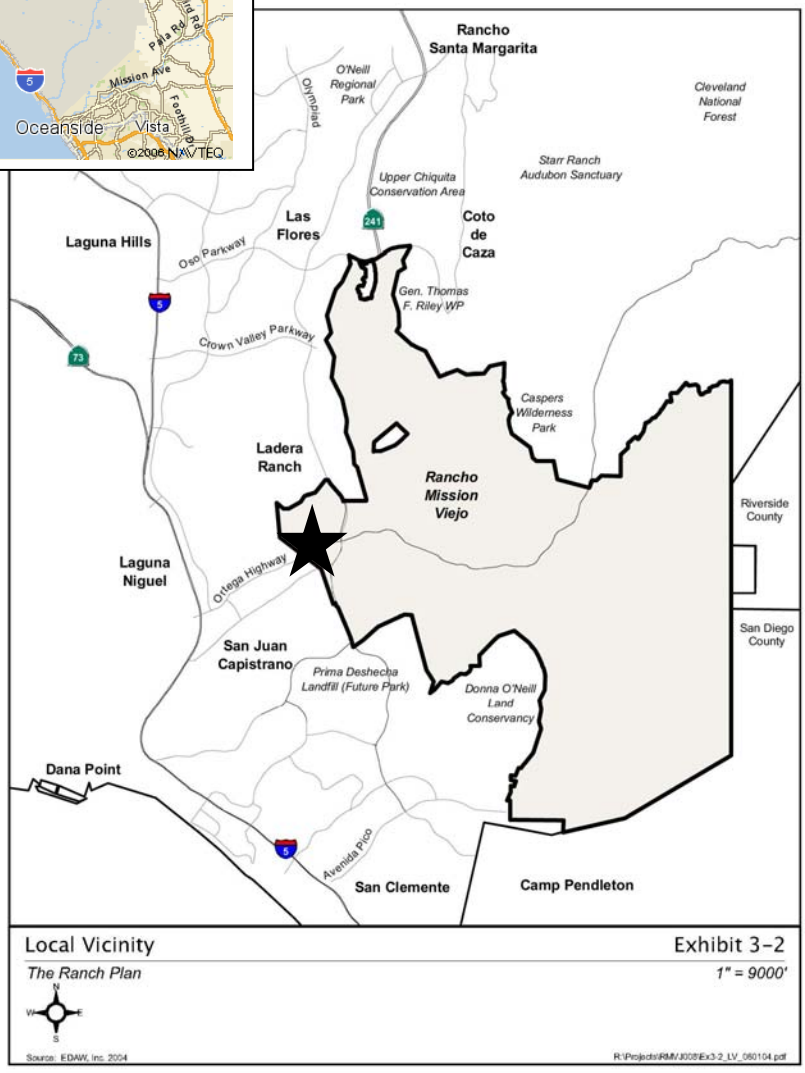
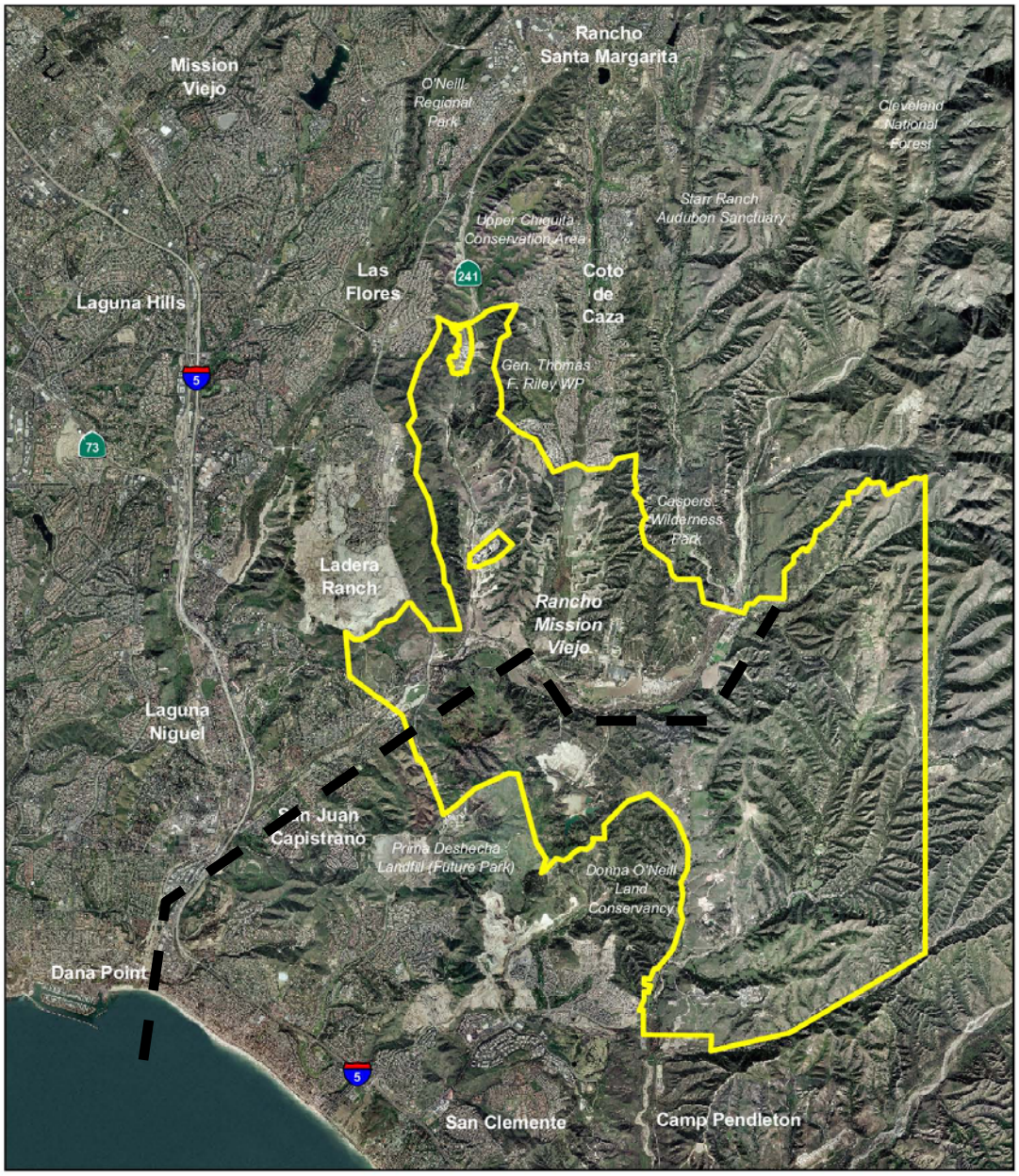


Figure 2
Project Aerial Photograph

The Ranch Plan project (solid line) is located north and south of San Juan Creek in the vicinity of Antonio Parkway and Ortega Highway. Dashed line represents San Juan Creek.



Aerial Photograph of the Project Site — Exhibit 3-3

The Ranch Plan — *1" = 9,000'*

N
W E
S

Source: EDAW, Inc. 2004

R:\Projects\RMV-J008\Ex3-3_Aerial_060104.pdf

Figure 3
Land Use Plan

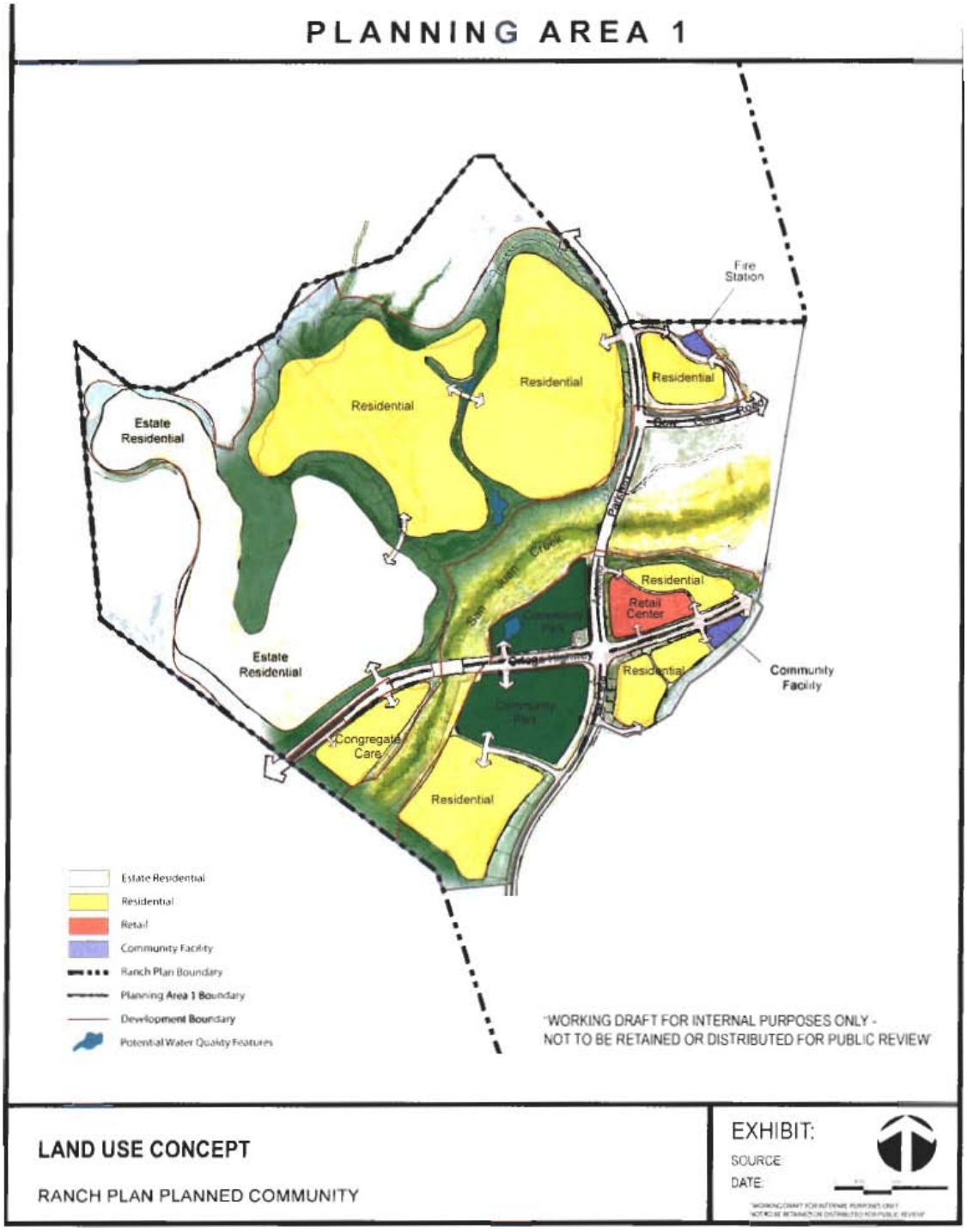
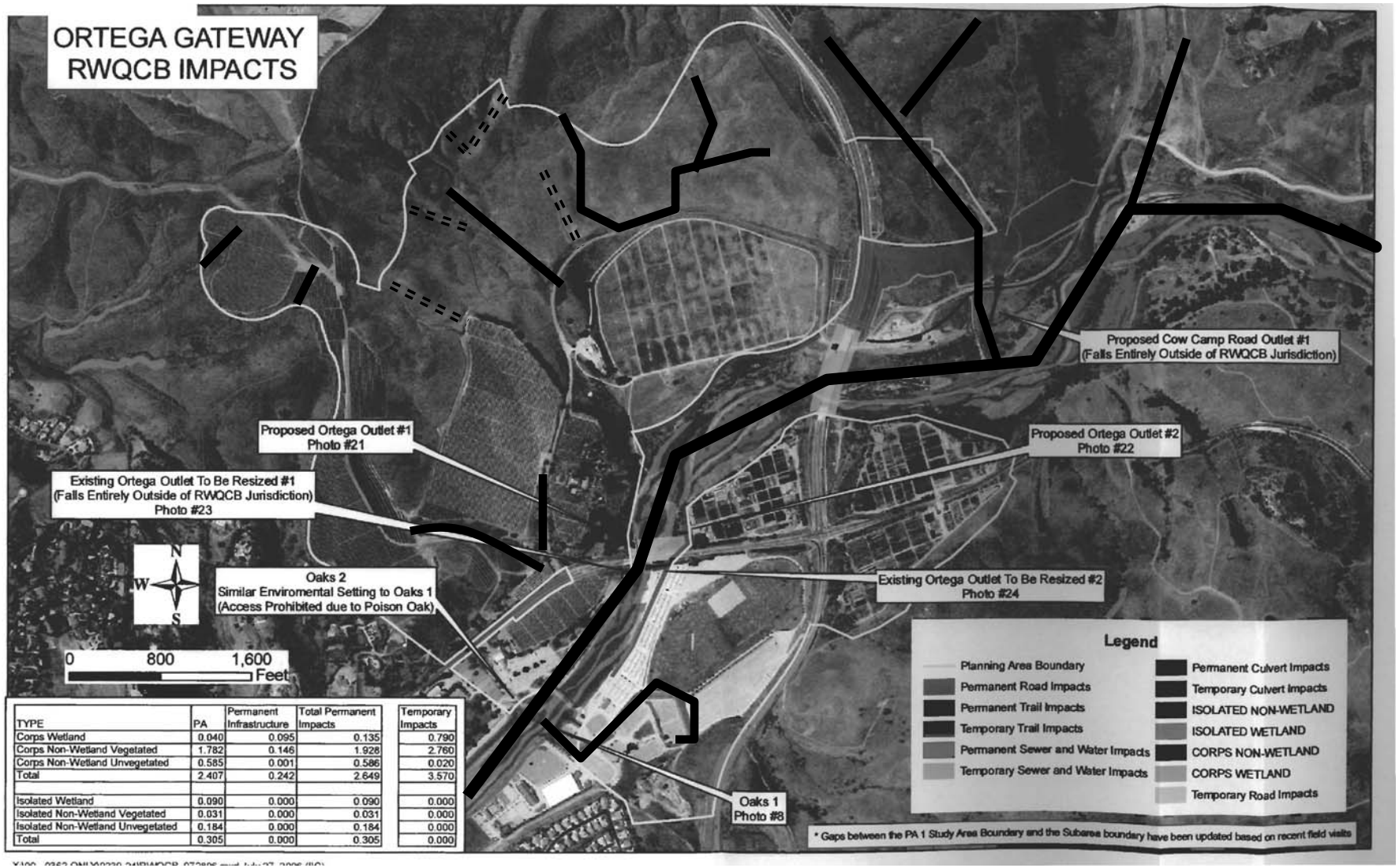


Figure 4
Jurisdictional Areas Map

Solid lines indicate areas of waters of the U.S./State, and dashed lines indicate non-federal waters of the State.



TYPE	PA	Permanent Infrastructure	Total Permanent Impacts	Temporary Impacts
Corps Wetland	0.040	0.095	0.135	0.790
Corps Non-Wetland Vegetated	1.782	0.146	1.928	2.760
Corps Non-Wetland Unvegetated	0.585	0.001	0.586	0.020
Total	2.407	0.242	2.649	3.570
Isolated Wetland	0.090	0.000	0.090	0.000
Isolated Non-Wetland Vegetated	0.031	0.000	0.031	0.000
Isolated Non-Wetland Unvegetated	0.184	0.000	0.184	0.000
Total	0.305	0.000	0.305	0.000

Figure 5
Ranch Plan Aquatic Resource Conservation Areas

Planning Area 1 (PA 1) is part of the larger Ranch Plan for development and accompanying Aquatic Resource Conservation Plan created by the coordinated planning process.

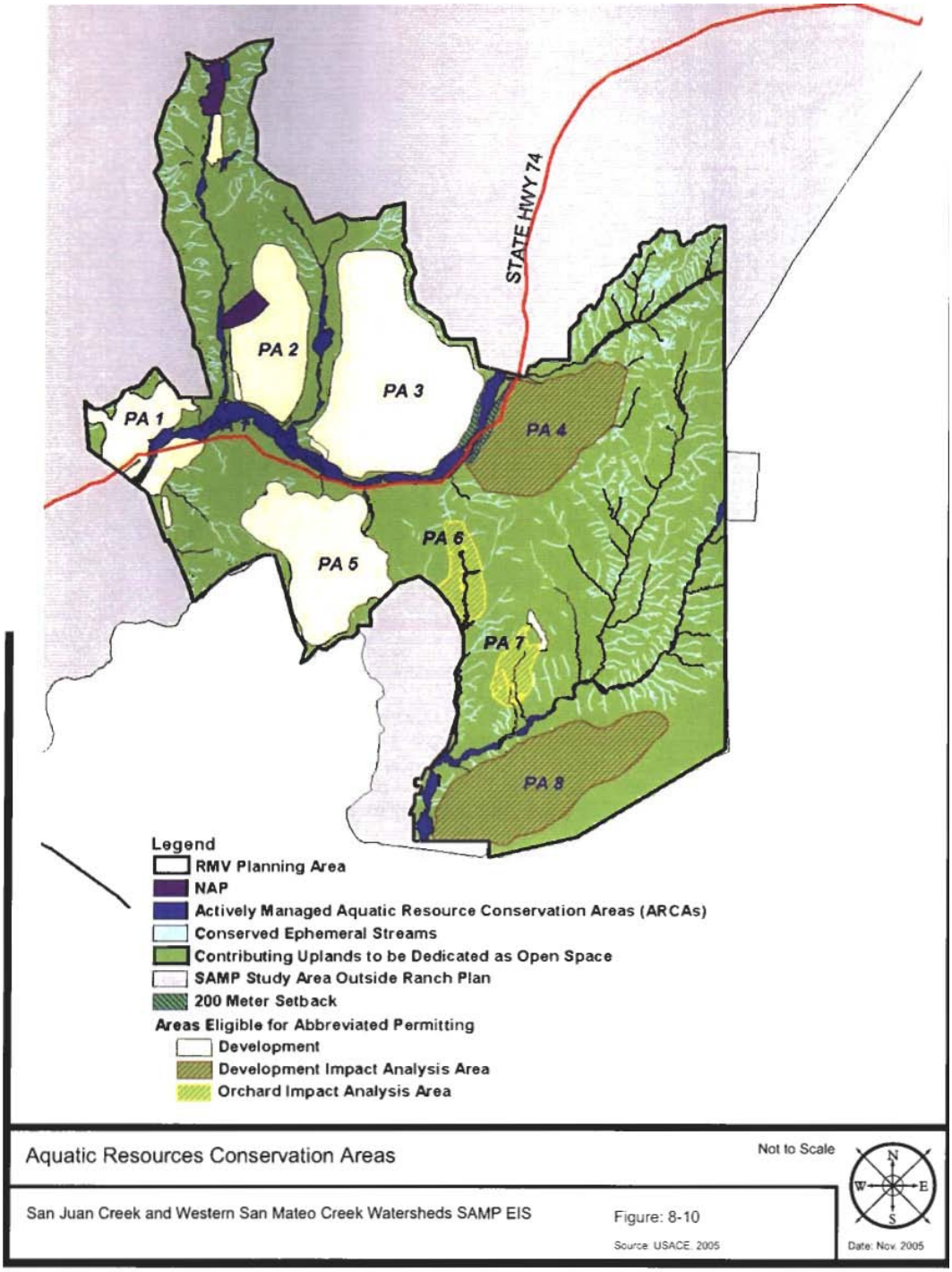


Figure 6
Canada Gobernadora Mitigation Area Plan

Mitigation for loss of vegetated waters is proposed within the Gobernadora Ecosystem Restoration Area in Canada Gobernadora.

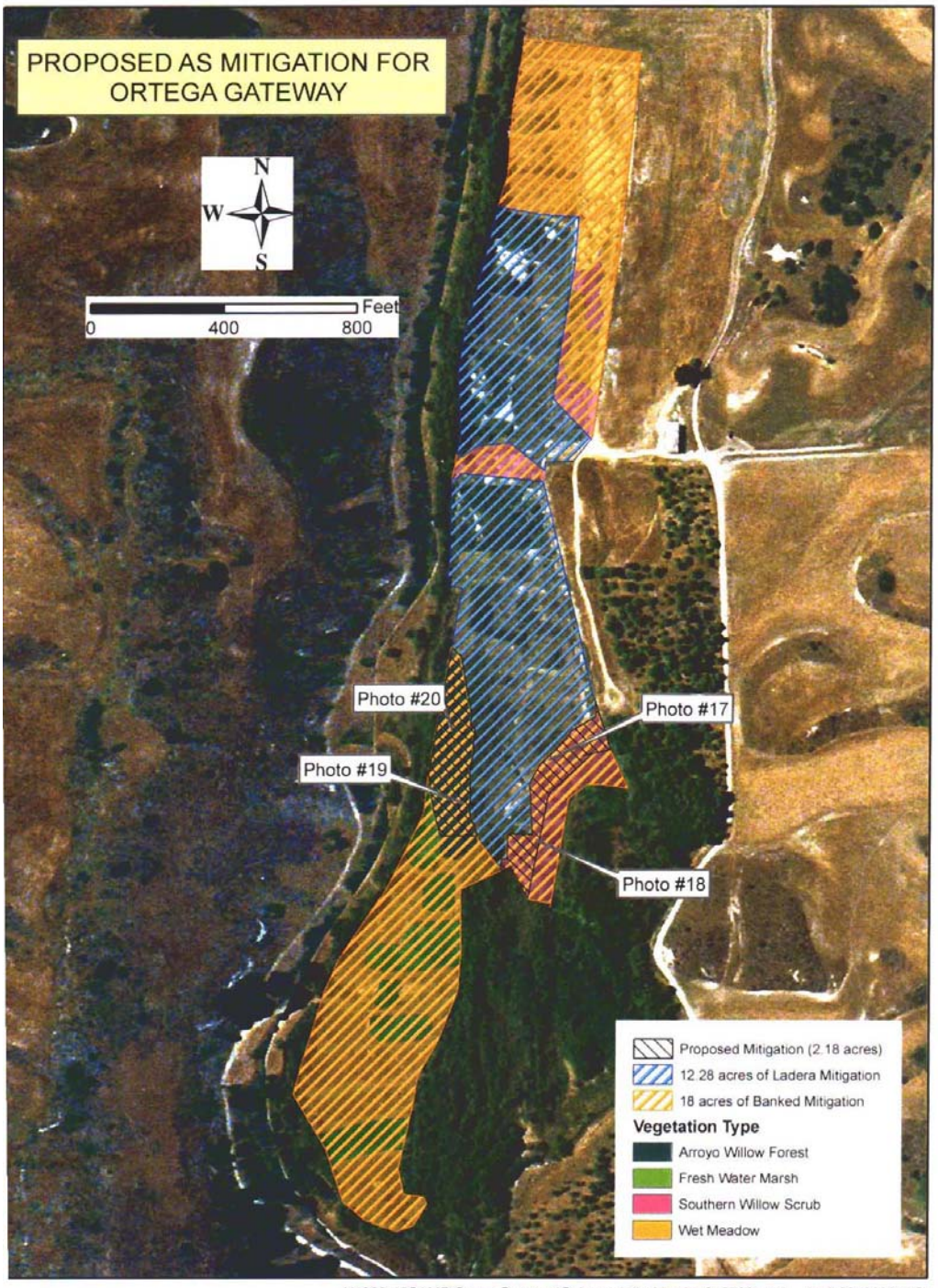


Figure 7
Site Plan and Post-Construction Treatment BMPs

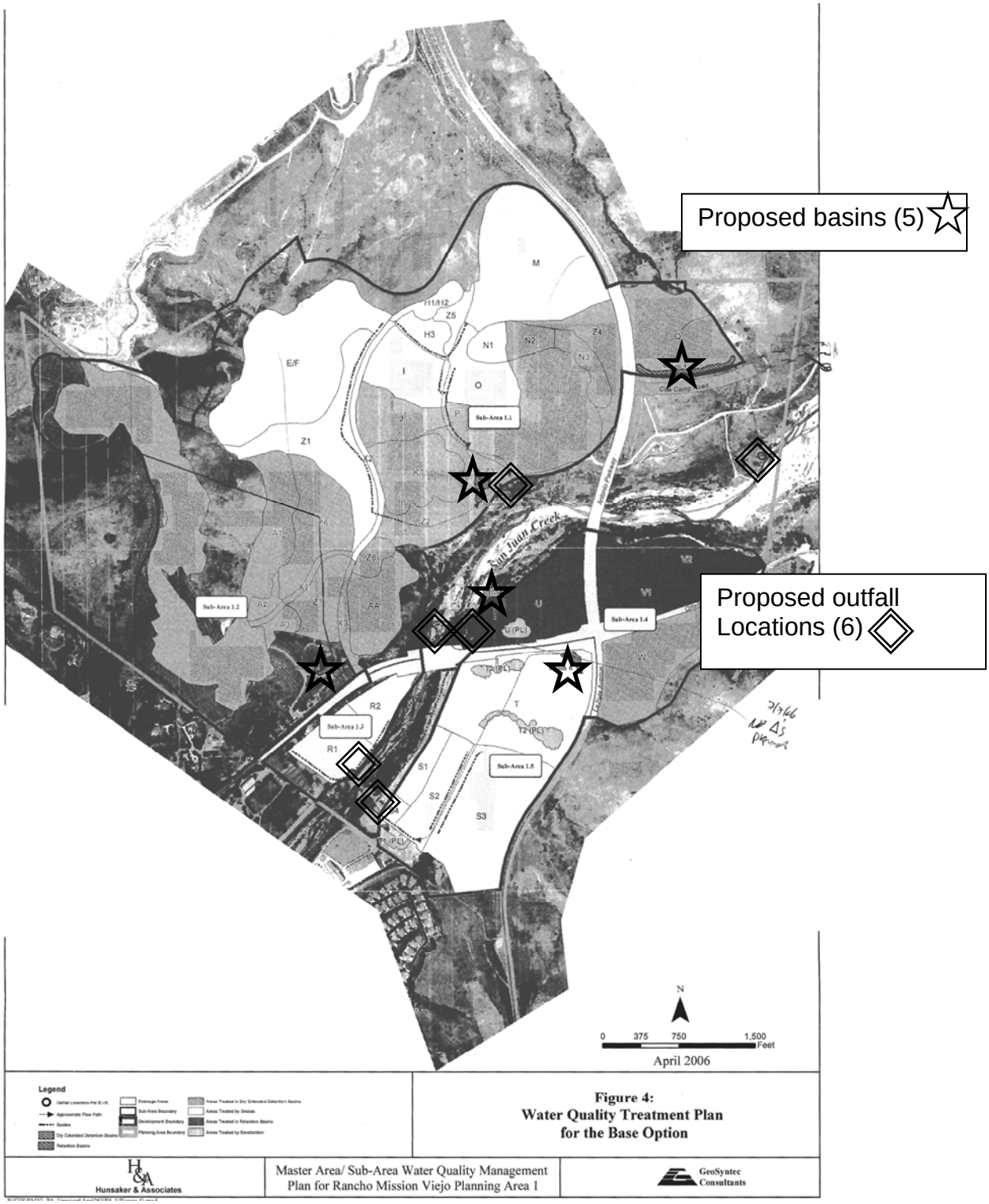
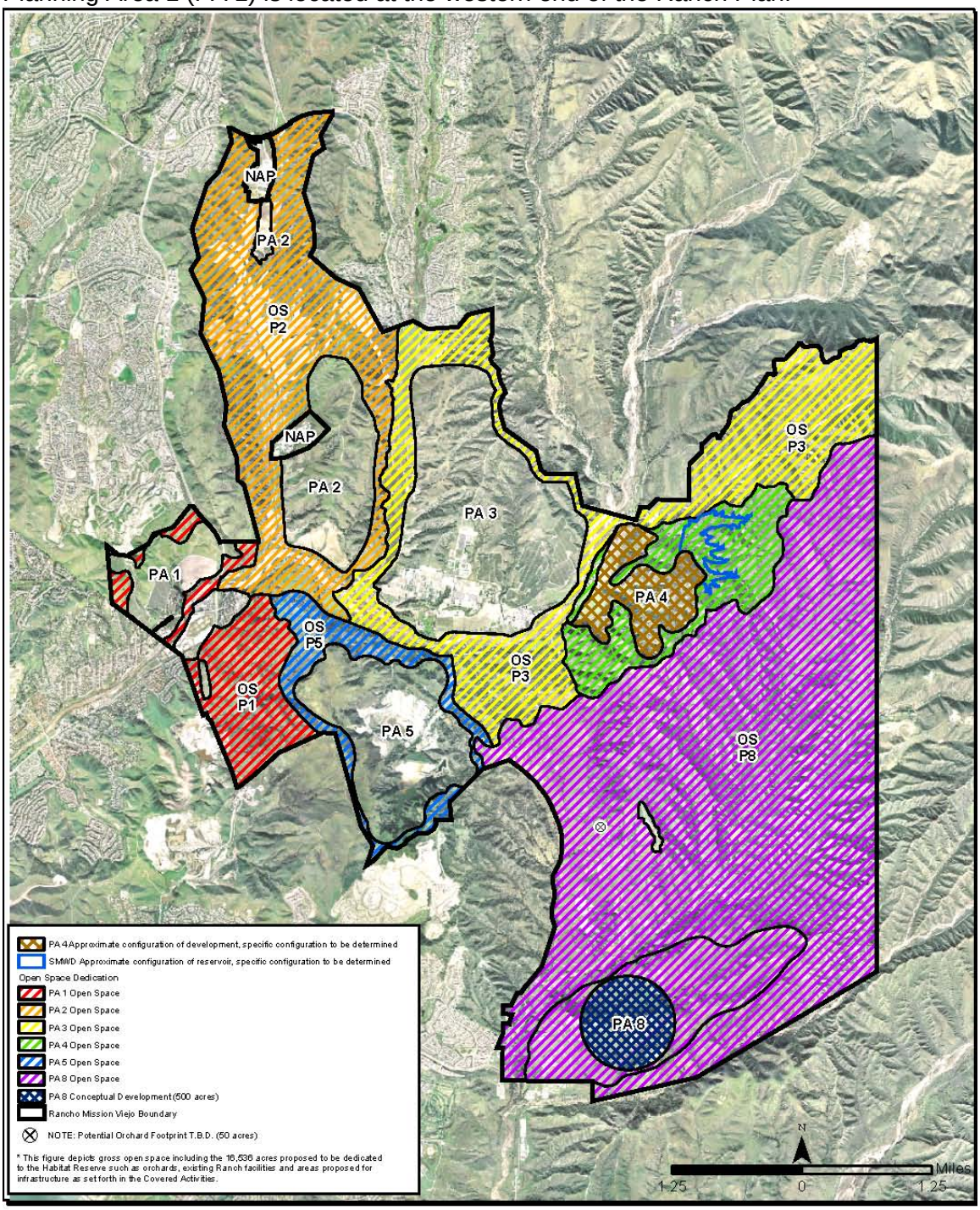


Figure 8
Planned Open Space Within the Ranch Plan

Open space areas (OS) correspond to the eight Planning Areas (PA) within the Ranch Plan. Planning Area 1 (PA 1) is located at the western end of the Ranch Plan.



RMV Open Space & Phasing Plan

EXHIBIT
A